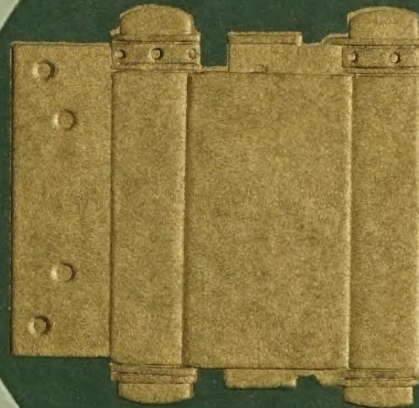


TRADE **CHICAGO** MARK
SPRING HINGES



CHICAGO SPRING HINGE COMPANY
MANUFACTURERS
CHICAGO
U. S. A.

TRADE **CHICAGO** MARK
SPRING HINGES

CATALOGUE NUMBER 73

ORGANIZED 1871
INCORPORATED 1885

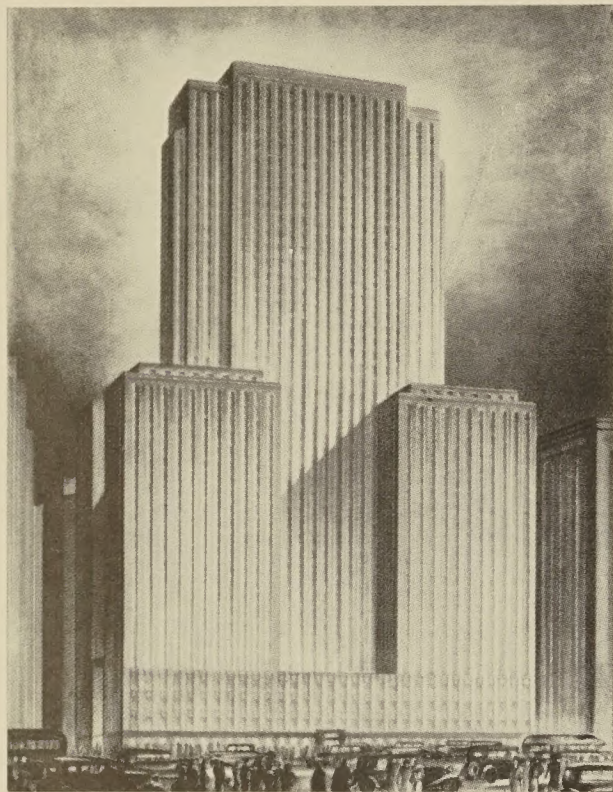
Chicago Spring Hinge Company,

MANUFACTURERS
GENERAL OFFICES & WORKS
1500 CARROLL AVE.
CHICAGO 7, ILLINOIS
U. S. A.

PRINTED IN U. S. A.

CATALOGUE COPYRIGHT, 1958
CHICAGO SPRING HINGE COMPANY
CHICAGO, U. S. A.

Years of Progress



The Field Building—Chicago
Architects: Graham, Anderson, Probst & White, Chicago

Evidence of the adaptability of Chicago Spring Hinges to modern requirements and their recognized quality, is indicated by their use on many important buildings throughout the United States, such as these illustrated.

The past seventy-three years, since the Chicago Spring Hinge Company was incorporated, have been years of great progress in every field of endeavor.

During this period the spirit of progress has prevailed within our organization and it has developed many new types of Spring Hinges and improved other types to meet modern requirements.



Criminal Courts Building—New York City
Architects: Harvey Wiley Corbett and Charles B. Meyers

Quality

We believe the quality of Chicago Spring Hinges is universally recognized. Our trade mark identifies that quality.

LOOK FOR THE TRADE MARK

TRADE **CHICAGO** MARK
SPRING HINGES

MAKERS OF QUALITY HARDWARE SINCE 1885

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SPRING HINGES

**United States Federal Specification Type Numbers
With Comparative
Chicago Spring Hinge Company Type Numbers
Specify by C. S. H. Co. Type Number
Also Specify Size and Finish, if required.**

U. S. Federal Spec. Type Number	Specify C. S. H. Co. Type Number and Following Information	Federal Specification Number	C. S. H. Co. Number	U. S. Federal Finish Symbol
F1840	Size 9 Inch	FF-H-111a	280-F1B	US1B
"	" 11 "	"	281-F1B	"
"	" 13 "	"	282-F1B	"
2301	Specify Finish	FF-H-116c	3005	Specify finish
2301A	Specify Finish	"	3055	Specify finish
2302	Specify Finish	"	4005	Specify finish
2302A	Specify Finish	"	4055	Specify finish
2330	Specify Size and Finish	"	2051	Specify finish
2330A	Specify Size and Finish	"	2001	Specify finish
2331	Specify Size and Finish	"	2052	Specify finish
2331A	Specify Size and Finish	"	2002	Specify finish
2332	Specify Size and Finish	"	1051	Specify finish
2332A	Specify Size and Finish	"	1001	Specify finish
2333	Specify Size and Finish	"	9052	Specify finish
2333A	Specify Size and Finish	"	9002	Specify finish
2334		"	3051	Specify finish
2390	External tension adjustment	"	4057	Specify finish
2391	Internal " "	"	6057	Specify finish
4101	Stile thickness 1 1/8 to 1 3/8 in.	FF-H-116c	2242-Rev-F26	US26
4101A	" " 1 1/8 to 1 3/8 in.	"	2244-F26	US26
4102	Partition thickness 1 1/4 in.	"	2842-Rev-F26	US26
4106		"	F2222-Rev-F26	US26
4115	Partition thickness 1 1/4 in.	"	2642-Rev-F26	US26
4140	Stile thickness 1 1/4 in.	"	A4227-F26	US26
4200	" " 1 1/4 in.	"	AG47227-F26	US26
4202	" " 1 1/4 in.	"	ADG47227-F26	US26
4301		FF-H-136	1252K-F26	US26
4301A	Stile thickness 1 1/4 in.	"	1252-1247C-F26	US26
4309	Oval Knob	"	1250-F26	US26
4315	Partition thickness 1 1/4 in	"	1253-F26 (Cut for 1250)	US26
4316	" " " "	"	D1253-F26 (Cut for 1250)	US26
4330		"	1233-F26	US26
4331	Specify Door Thickness	"	1234-58-F26	US26
4332		"	1233-F26	US26

List of Finishes and Symbols

U. S. Standard Finish Symbol	C.S.H.Co. Finish Symbol	Finish Description	REMARKS
USP	FP	Primed (For Painting)	Federal Specifications indicate "Either Cadmium or Zinc plated may be furnished." Use F2G finish. Plating processed to uniform dull finish.
US1B	F1B	Japanned, Bright Black	
US1D	F1D	Japanned, Dead Black	
US2C	F2C	Cadmium Plated.....	
US2G	F2G	Zinc, Plated, Dull finish.....	Federal Specifications indicate "Hot dipping shall not be employed for coating metal that may be injured by heat." Use F2G electro-plated finish.
US2H	F2H	Zinc Coated, Hot Dipped	
US3	F3	Brass, Plated or natural metal, Bright	
US4	F4	Brass, Plated or natural metal, Dull	
US9	F9	Bronze, Plated or natural metal, Bright	
US10	F10	Bronze, Plated or natural metal, Dull	
US14	F14	Nickel Plated, Bright	
US15	F15	Nickel Plated, Dull	
US26	F26	Chromium Plated, Bright	
US26D	F26D	Chromium Plated, Dull	

Some of the finishes listed above are not indicated for some types of hardware in the catalogue and are not considered as standard. These finishes can be supplied on special orders.

Label Color System

Green

Steel or Iron Metal
Japanned and Primed Finish

We use the above method of labeling to facilitate locating the goods in stock. The label color broadly groups the metal and class of finish.

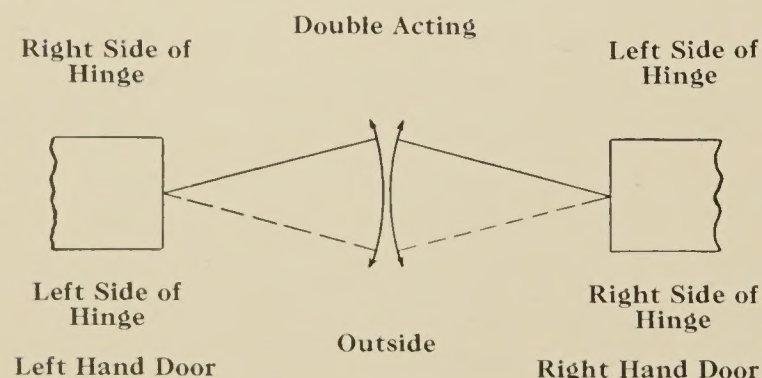
Blue

Steel or Iron Metal
All Other Finishes

Red

Brass or Bronze Metal
All Finishes

To Determine Hand of Door

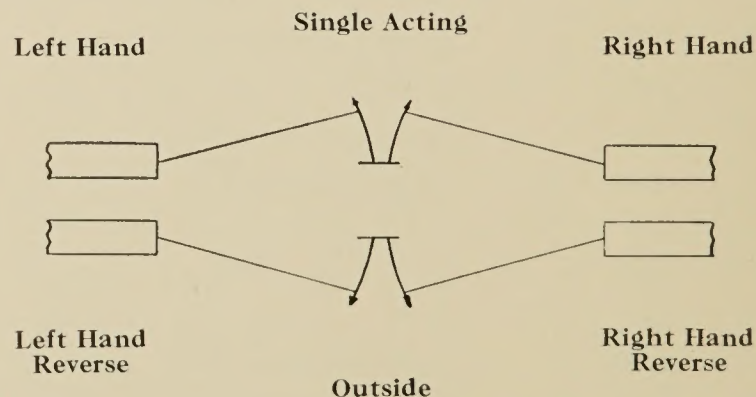


(Hand of door is determined from outside)

When standing on outside of door and hinges are on the right, it is right hand. When hinges are on the left, it is left hand.

A double acting door opens from you and toward you, therefore is not called reverse like a single acting door.

When specifying two finishes on the same hinge, stand in the doorway facing the jamb to determine the right or left side.



(Hand of door is determined from outside)

When standing on outside of door (opening from you) and hinges are on the right, it is right hand. When hinges are on the left, it is left hand.

A door (opening toward you) is the same hand but is called right hand reverse or left hand reverse.

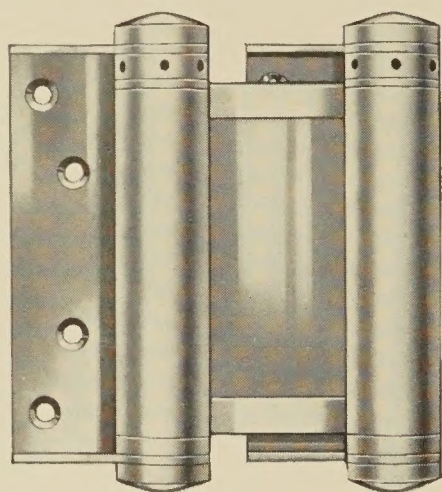
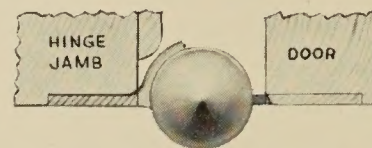
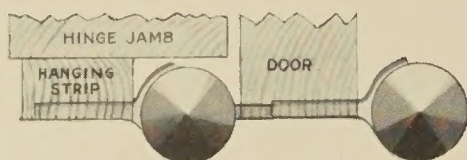
List of Finishes and Comparative Symbols

U. S. Finish Symbol	Finish Description	Chicago Spring Hinge Co.	Corbin	Lock- wood	McKinney	Russwin	Sargent	Schlage	Stanley	Yale
USP	Primed, For Painting.....	FP	PC	P	PC	PC	PC	P	P	PC
US1B	Japanned, Bright Black.....	F1B			J	JAP	BJ		J	J
US1D	Japanned, Dead Black.....	F1D	KF		DB		J		J1	
US2C	Cadmium Plated.....	F2C			Z		W		K	
US2G	Zinc Plated, Dull.....	F2G								
US2H	Zinc Coated, Hot Dipped.....	F2H			G		ZD		R	
US3	Brass, Plated or natural metal, Bright.....	F3	A	3	BP	F10	B	3	C	AZ10
US4	Brass, Plated or natural metal, Dull.....	F4	EA	4	OB	F9	OB	4	F	AY22
US9	Bronze, Plated or natural metal, Bright.....	F9			B		P	9	A	BZ10
US10	Bronze, Plated or natural metal, Dull.....	F10	DB	10	DE	F11D	OP	10	A5	BY22
US14	Nickel Plated, Bright.....	F14	E	14	N	F4	N	14	N	NZ10
US15	Nickel Plated, Dull.....	F15	DE	15	ND	F14	LN	15	N5	
US26	Chromium Plated, Bright.....	F26	CR	26	C	F24	CM	26	CM	DZ10
US26D	Chromium Plated, Dull.....	F26D	DCR	26D	CD	F34	DCM	26D	CMD	DY10

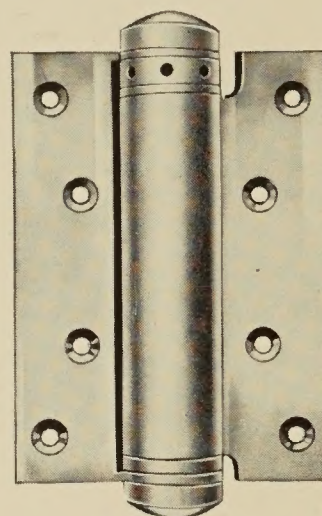
See list of finishes and remarks on page 6.

Chicago "Triplex" Spring Butt-Hinge (Three Leaf Type)

Hanging Strip Required



Double Acting
 Type 2001—Steel
 Type 2051—Brass or Bronze Metal



Single Acting
 Type 2002—Steel
 Type 2052—Brass or Bronze Metal

Applied to Jamb Hanging Strip

The Chicago "Triplex" Spring Butt-Hinge is constructed in accordance with scientific principles and has distinctive and practical features. The appearance, finish and durability of this hinge distinguish it as "A Spring Hinge of Quality."



LOOK FOR THE TRADE MARK

This type of Double Acting Hinge is desirable for outside doors, because it has two axes which give the door resistance against wind pressure when it is in closed position. It also has two springs, with tension adjustment and greater tension may be applied to close the door from one direction than the other. The design of this hinge allows the door to be opened 180 degrees, if other conditions permit.

"Triplex" hinges are made of the best materials and the highest standards of workmanship are maintained in production.

The New *Streamlined* Chicago "Triplex" Spring Butt-Hinge

Button Tip Ornamentation
Modern *Streamlined* Appearance

Streamlined "Triplex" double and single acting spring butt-hinges have button tip ornamentation in keeping with the most modern designs in builders hardware. They are as modern as the newest streamlined train or the latest

flagship of the trans-continental air fleets.

Careful designing has created features of proven advantage as illustrated and described below.

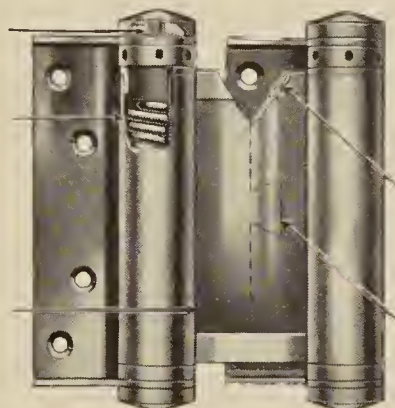
Special Features

Concealed Hardened Steel Frictionless Bearings
Wrought Metal Non-Breakable Spring Lugs

Button tip ornamentations are held securely in place by improved lock washer of latest design.

Springs are made of high grade tempered steel of ample size and proper length, diameter and gauge.

Metal of spring barrel continues to form a multiple thickness flat web between the barrels.



Lugs at each end of the spring barrels are made of wrought non-breakable metal with hardened steel bearings—cadmium treated. This reduces wear to a minimum.

Overlap of metal in connecting web between spring barrels gives strength where needed most.

Dove-tail for locking continuous piece of metal used in forming barrels and connecting web.

Double Acting
Type 2001—Steel
Type 2051—Brass or Bronze Metal

SPECIFICATION SCHEDULE Approximate Dimensions—Template Blue Print on Request

Length of Flange (Size of Hinge)	Minimum Thickness of Door or Hanging Strip	Maximum Thickness of Door or Hanging Strip with Chamfering	Maximum Thickness of Door or Hanging Strip Without Chamfering. For Metal Doors	Depth of Hanging Strip	DOORS			
					Thick-ness	Width	Thick-ness	Width
3	$\frac{3}{4}$	1	$\frac{13}{16}$	$\frac{5}{8}$	$\frac{3}{4}$ in. x 2 ft.	2 in. to	1 in. x 2 ft.	0 in.
4	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$\frac{5}{8}$	$\frac{7}{8}$ in. x 2 ft.	2 in. to	$1\frac{1}{4}$ in. x 2 ft.	0 in.
5	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{8}$ in. x 2 ft.	4 in. to	$1\frac{1}{2}$ in. x 2 ft.	2 in.
6	$1\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$\frac{7}{8}$	$1\frac{1}{4}$ in. x 2 ft.	6 in. to	$1\frac{3}{4}$ in. x 2 ft.	4 in.
7	$1\frac{3}{8}$	2	$1\frac{1}{2}$	$\frac{7}{8}$	$1\frac{3}{8}$ in. x 2 ft.	8 in. to	2 in. x 2 ft.	6 in.
8	$1\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{3}{4}$	1	$1\frac{5}{8}$ in. x 2 ft.	10 in. to	$2\frac{1}{4}$ in. x 2 ft.	8 in.
10	$1\frac{3}{4}$	$2\frac{1}{2}$	2	$1\frac{1}{8}$	$1\frac{3}{4}$ in. x 3 ft.	0 in. to	$2\frac{1}{2}$ in. x 2 ft.	10 in.
12	$2\frac{1}{2}$	3	$2\frac{5}{8}$	$1\frac{1}{4}$	$2\frac{1}{2}$ in. x 3 ft.	2 in. to	3 in. x 3 ft.	0 in.

SPECIFYING.—It is important that the proper size of hinge be specified to avoid the annoyance of doors not operating properly. The schedule given above will assist in selecting hinges which will be large enough to operate the doors properly.

This schedule is for inside doors, made of soft wood, and not weighted with plate glass or heavy hardware.

For outside doors, subject to draft; heavy doors of hardwood or doors weighted with plate glass or hardware, we suggest the use of three hinges to a door or two of the largest hinges which the thickness of the door will allow.

A narrow high door requires less spring power than a wide low door of the same weight or thickness.

For Metal Doors be sure to specify large enough hinges to avoid chamfering.

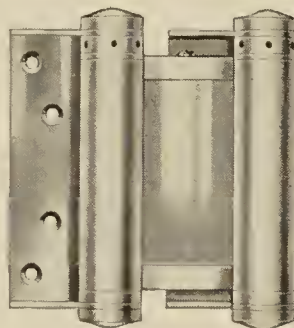
Chicago "Triplex" Spring Butt-Hinges

Double Acting

Hanging Strip Required



Special Features
 Illustrated on Page 9



Concealed Hardened Steel Bearings
 Button Tip Ornamentation

Type 2001—Steel*
 Type 2051—Brass or Bronze Metal*

Modern *Streamlined* Appearance

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15	The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.	
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

SIZE OF HINGE

Length of Hinge Flange. Inches	3	4	5	6	7	8	10	12
Thickness of Door	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{1}{2}$
Maximum indicated requires chamfering.	to	to	to	to	to	to	to	to
For dimensions see page 46.	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3
Approximate weight per pair. Pounds.....	$2\frac{3}{8}$	$3\frac{1}{4}$	$5\frac{1}{8}$	$7\frac{1}{2}$	$10\frac{5}{8}$	$15\frac{7}{8}$	24	$35\frac{1}{2}$

The above weights include the wrapping and box, but not the packing and shipping container. For approximate gross weight, add 3%.

NOTE: Specify by the type, finish symbol and size. Example:—Type 2001-F4-4 in.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one pair in a box, with screws of same finish, tension adjuster and instructions for applying.

Repair parts, page 48. Detail drawing with measurements, page 46.

Chicago "Triplex" Spring Butt-Hinges

Single Acting

Hanging Strip Required



Special Features
Illustrated on Page 9.



Concealed Hardened Steel Bearings
Button Tip Ornamentation

Type 2002—Steel*
Type 2052—Brass or Bronze Metal*

Modern *Streamlined* Appearance

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15	The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.	
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

SIZE OF HINGE

Length of Hinge Flange, Inches	3	4	5	6	7	8	10
Thickness of Door For dimensions see page 46.	$\frac{3}{4}$ to 1	$\frac{7}{8}$ to $1\frac{1}{4}$	$1\frac{1}{8}$ to $1\frac{1}{2}$	$1\frac{1}{4}$ to $1\frac{3}{4}$	$1\frac{3}{8}$ to 2	$1\frac{5}{8}$ to $2\frac{1}{4}$	$1\frac{3}{4}$ to $2\frac{1}{2}$
Approximate weight per pair. Pounds.....	$1\frac{3}{8}$	2	$3\frac{1}{8}$	$4\frac{3}{4}$	$5\frac{1}{2}$	$8\frac{7}{8}$	13

The above weights include the wrapping and box but not the packing and shipping container. For approximate gross weight add 3%.

NOTE:—Specify by the type, finish symbol and size. Example:—Type 2002-F4-4 in.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Single acting hinges, when so ordered, will be supplied with reverse acting springs to hold the door open.

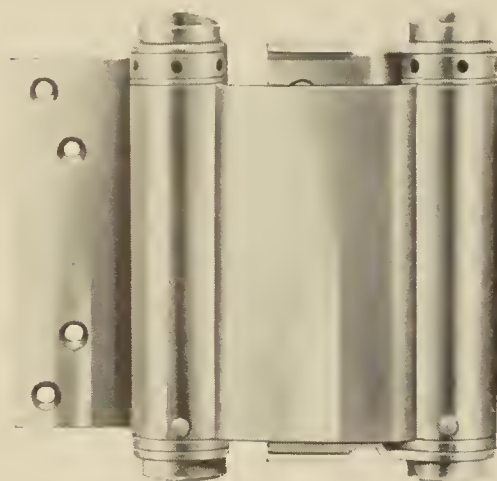
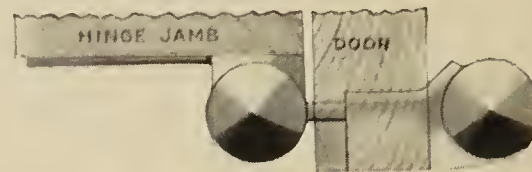
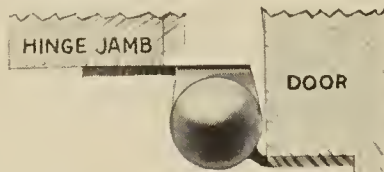
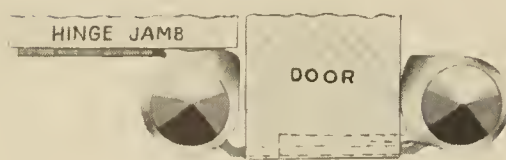
The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one pair in a box, with screws of same finish, tension adjuster and instructions for applying

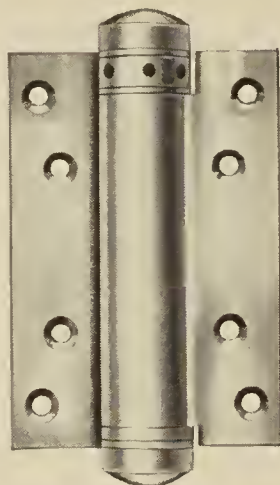
Repair parts, page 48. Detail drawing with measurements, page 46

Chicago "Simplex" Spring Butt-Hinge (Simple Application)

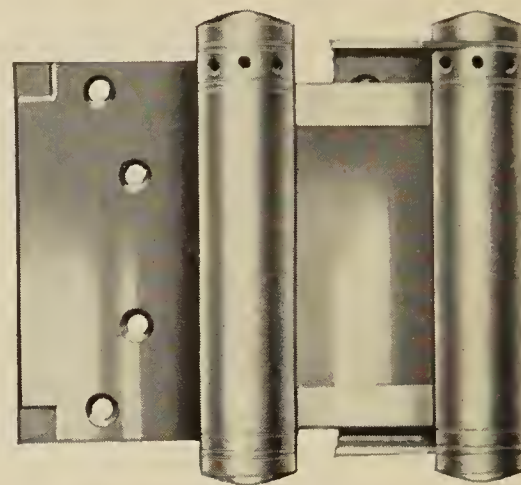
No Hanging Strip Required



Double Acting
Type 1001—Steel
Type 1051—Brass or Bronze Metal
Door Flange 3-4-5-6 inch
Shallow Mortise Design



Single Acting
Type 9002—Steel
Type 9052
Brass or Bronze Metal



Double Acting
Type 9001—Steel
Type 9051—Brass or Bronze Metal
Door Flange 7-8-10 inch
Heavy Design

Applied Directly to Hinge Jamb

The Chicago "Simplex" Spring Butt-Hinge is designed to be applied directly to the hinge jamb without the use of a Jamb Hanging Strip.



LOOK FOR THE TRADE MARK



Type 1001—Steel
Type 1051—Brass or Bronze Metal
Door Flange 3-4-5-6 inch

This type of Double Acting Hinge is applied with the entire thickness mortised into the door and the Jamb Flange attached to the surface of the hinge jamb. Application by this method is both simple and economical.

This hinge is made of the best materials and highest standards of workmanship are maintained in the production.

The Single Acting Hinge is also applied with the entire thickness mortised into the Door and the Jamb Flange attached to the surface of the hinge jamb. If desired, however, the Jamb Flange may be mortised into the hinge jamb and the Door Flange into the door just as Single Acting Hinges without springs are applied. The Jamb Flange is flat so that the barrel of the hinge will not interfere with the door casing.

The New *Streamlined* Chicago "Simplex" Spring Butt-Hinge

Button Tip Ornamentation
Modern *Streamlined* Appearance

The new *Streamlined* "Simplex" spring butt-hinges, with button tips, combine the beauty of modern design with simplicity of application.

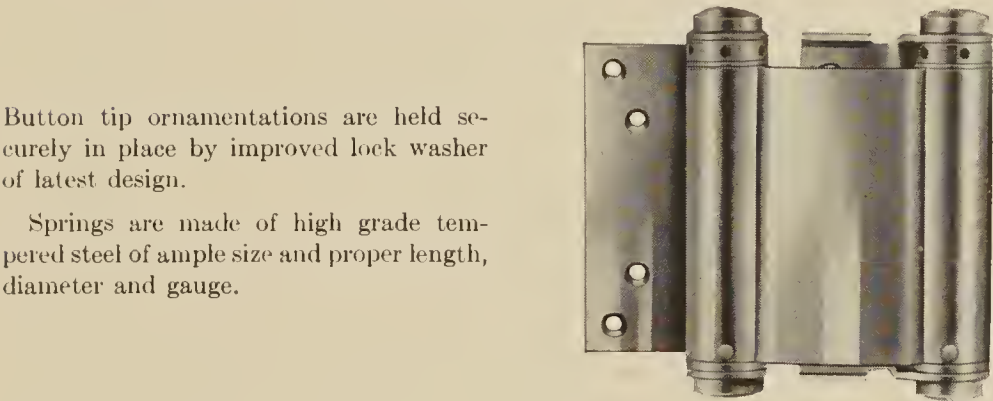
They are as modern as the newest streamlined train and designed to harmonize with modern architectural requirements.

The quality of these hinges is the result of over seventy-three years of experience in the manufacture of spring hinges.

Important features of proven advantage are illustrated and described below.

Special Features

Concealed Hardened Steel Frictionless Bearings
Wrought Metal Non-Breakable Spring Lugs



Button tip ornamentations are held securely in place by improved lock washer of latest design.

Springs are made of high grade tempered steel of ample size and proper length, diameter and gauge.

Door flange requires a Shallow mortise.

Lugs at each end of the spring barrels are made of wrought non-breakable metal with hardened steel bearings—cadmium treated. This reduces wear to a minimum.

Double Acting
Type 1001—Steel
Type 1051—Brass or Bronze Metal

Specification Schedule

Approximate Dimensions—Template Blue Print on request

Type Number	Length of Door Flange (Size of Hinge)	Minimum Thickness of Door	Maximum thickness of Door With Chamfering	Maximum Thickness of Door Without Chamfering. For Metal Doors	DOORS			
					Thickness	Width	Thickness	Width
1001	3	$\frac{3}{4}$	1	$\frac{7}{8}$	$\frac{3}{4}$ in. x 2 ft.	2 in. to	1 in. x 2 ft.	0 in.
1001	4	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$\frac{7}{8}$ in. x 2 ft.	2 in. to	$1\frac{1}{4}$ in. x 2 ft.	0 in.
1001	5	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{3}{8}$	$1\frac{1}{8}$ in. x 2 ft.	4 in. to	$1\frac{1}{2}$ in. x 2 ft.	2 in.
1001	6	$1\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{4}$ in. x 2 ft.	6 in. to	$1\frac{3}{4}$ in. x 2 ft.	4 in.
9001	7	$1\frac{3}{8}$	2	$1\frac{1}{2}$	$1\frac{3}{8}$ in. x 2 ft.	8 in. to	2 in. x 2 ft.	6 in.
9001	8	$1\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{5}{8}$ in. x 2 ft.	10 in. to	$2\frac{1}{4}$ in. x 2 ft.	8 in.
9001	10	$1\frac{3}{4}$	$2\frac{1}{2}$	2	$1\frac{3}{4}$ in. x 3 ft.	0 in. to	$2\frac{1}{2}$ in. x 2 ft.	10 in.

SPECIFYING.—It is important that the proper size of hinge be specified to avoid the annoyance of doors not operating properly. The schedule given above will assist in selecting hinges which will be large enough to operate the door properly.

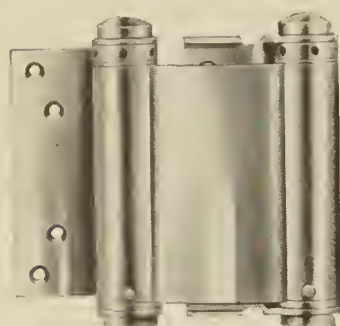
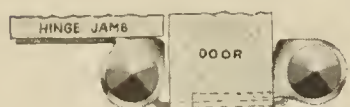
This schedule is for inside doors, made of soft wood, and not weighted with plate glass or heavy hardware.

For outside doors, subject to draft, heavy doors of hardwood or doors weighted with plate glass or hardware, we suggest the use of three hinges to a door or two of the largest hinges which the thickness of the door will allow.

A narrow high door requires less spring power than a wide low door of the same weight or thickness.

For Metal Doors be sure to specify large enough hinges to avoid chamfering.

Chicago "Simplex" Spring Butt-Hinges



Type 1001—Steel*
Type 1051—Brass or Bronze Metal*
Door Flange 3-4-5-6 inch
Shallow Mortise Design

Double Acting

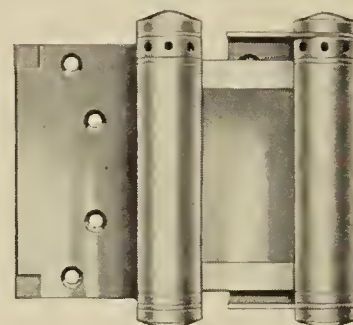
No Hanging Strip Required

Special Features

Illustrated on Page 13

Concealed Hardened Steel Bearings

Button Tip Ornamentation



Type 9001—Steel*
Type 9051—Brass or Bronze Metal*
Door Flange 7-8-10 inch
Heavy Design

Modern *Streamlined* Appearance

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....	Japanned	Brass Metal, Bright.....	F3
Primed.....	For Painting	Brass " Dull.....	F4
Brass, Bright.....	Plated	Bronze " Bright.....	F9
Brass, Dull.....	"	Bronze " Dull.....	F10
Bronze, Bright.....	"	Brass " Bright Nickel.....	Plated F14
Bronze, Dull.....	"	Brass " Dull Nickel.....	" F15
Zinc, Dull.....	"	Brass " Bright Chromium.....	" F26
Nickel, Bright.....	"	Brass " Dull Chromium.....	" F26D
Nickel, Dull.....	"		
Chromium, Bright.....	"		
Chromium, Dull.....	"		

The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.

SIZE OF HINGE

Length of Door Flange, Inches	3	4	5	6	7	8	10
Thickness of Door	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{3}{4}$
Maximum indicated requires chamfering.	to	to	to	to	to	to	to
For dimensions see page 47.	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
Approximate weight per pair, Pounds.....	$2\frac{5}{8}$	$3\frac{3}{4}$	$5\frac{3}{4}$	$8\frac{1}{4}$	$11\frac{1}{4}$	$16\frac{1}{8}$	$25\frac{3}{4}$

The above weights include the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3%.

NOTE: Specify by the type, finish symbol and size. Example:—Type 1001-F4-4 in.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one pair in a box, with screws of same finish, tension adjuster and instructions for applying.

Repair parts, page 48. Detail drawing with measurements, page 47.

Chicago "Simplex" Spring Butt-Hinges

Single Acting

No Hanging Strip Required



Special Features
Illustrated on Page 13



Concealed Hardened Steel Bearings
Button Tip Ornamentation

Type 9002—Steel*
Type 9052—Brass or Bronze Metal*

Modern *Streamlined* Appearance

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15		
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.

SIZE OF HINGE

Length of Hinge Flange, Inches.....	3	4	5	6	7	8
Thickness of Door For dimensions see page 47.	$\frac{3}{4}$ to 1	$\frac{7}{8}$ to $1\frac{1}{4}$	$1\frac{1}{8}$ to $1\frac{1}{2}$	$1\frac{1}{4}$ to $1\frac{3}{4}$	$1\frac{3}{8}$ to 2	$1\frac{5}{8}$ to $2\frac{1}{4}$
Approximate weight per pair, Pounds.....	$1\frac{1}{2}$	2	$3\frac{1}{8}$	$4\frac{3}{4}$	$5\frac{1}{2}$	$9\frac{3}{8}$

The above weights include the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3%.

NOTE:—Specify by the type, finish symbol and size. Example:—Type 9002-F4-4 in.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Single acting hinges, when so ordered, will be supplied with reverse acting springs to hold the door open.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one pair in a box, with screws of same finish, tension adjuster and instructions for applying.

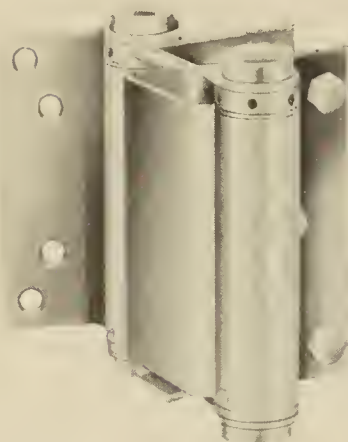
Repair parts, page 48. Detail drawing with measurements, page 47.

SPRING HINGES

Chicago "Simplex" Clamp-Flange Spring Hinges

**Double Acting
No Hanging Strip Required
For Doors in Trucking Doorways**

See pages 18 and 19 for specially constructed spring hinge for trucking doorways.



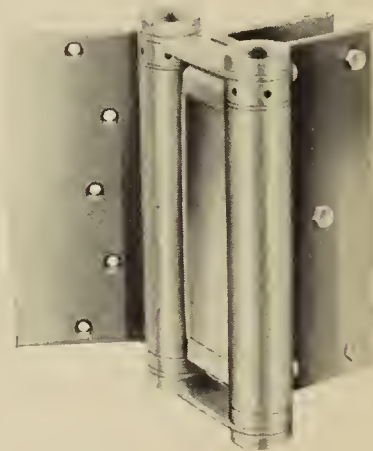
**Type 11001—Steel
Door Flange 4-5-6 inch
Shallow Mortise Design**

STEEL, PLANISHED (Finish Description Page 6)		Finish Symbol
Dead Black	Japanned	F1D
Primed	For Painting	FP
Brass, Bright	Plated	F3
Brass, Dull	"	F4
Bronze, Bright	"	F9
Bronze, Dull	"	F10
Zinc, Dull	"	F2G
Nickel, Bright	"	F14

Specify by the type, finish symbol, size, and door thickness.

Example: —Type 11001 —FP—4 in. door 1½ in.

Packed one pair in a box with bolts
and screws and tension adjuster.



**Type 19001—Steel
Door Flange 8-10 inch
Heavy Design**

Size and Specifications

Type Number	Length of Door Flange	†Thickness of Door	Width of Door Stile Not Less Than	Approximate Weight Per Pair
11001	4 inches	7⁄8 to 1 1⁄8 in.	2 3⁄8 inches	5 lbs.
11001	5 inches	1 1⁄8 to 1 3⁄8 in.	2 3⁄8 inches	7 1⁄2 lbs.
11001	6 inches	1 1⁄4 to 1 1⁄2 in.	2 3⁄8 inches	10 lbs.
19001	8 inches	1 1⁄2 to 1 3⁄4 in.	3 1⁄2 inches	22 1⁄8 lbs.
19001	10 inches	1 3⁄4 to 2 in.	3 1⁄2 inches	31 5⁄8 lbs.

†Always state exact thickness of door. Clamp Flange is not adjustable.

Use the largest size hinge which the thickness of door will allow.

This Clamp-Flange Spring Hinge has been designed for use on trucking doorways. The clamp flange is attached to the door with through bolts and provides a secure method of attaching the hinge to this type of door.

If doors are extra heavy or subject to frequent use, it is better to use three hinges to a door.

The third hinge should be placed as near the top hinge as conditions of application will permit.

Flat head machine screws will be furnished for applying jamb flange unless wood screws are specified.

For Doors with Hanging Strip, Type 12001

For doors to be hung with a hanging strip, use the "Triplex" Clamp-Flange Spring Hinge, Type 12001.



**Type HS1001—Steel
Type HS1051—Brass or Bronze Metal
Door Flange Length 3 in.—4 in.**

Chicago "Simplex" Half Surface Spring Hinges

**For Thin or Plywood Doors
Double Acting**

**Half Surface Application
Adjustable Tension**

Supplied in finishes as indicated above for Type 11001

Description

Type HS1001 Spring Hinges are specially suitable for plywood doors or gates that are thin and fastening screws will not hold securely in the edge of the door. One flange is applied to the surface of the door and the other to the surface of the jamb without a hanging strip.

If the door is wide use three hinges. Packed one pair in a box with flat head wood screws and tension adjuster. Approximate weight per pair, 3 inch—2 5⁄8 lbs. 4 inch—3 3⁄4 lbs.

The 3 inch hinge is for doors 3⁄4 in. to 1 in. thick. The 4 inch hinge is for doors 7⁄8 in. to 1 1⁄4 in. thick. Specify by the type, finish symbol and size. Example: —Type HS1001-FP-3 in.

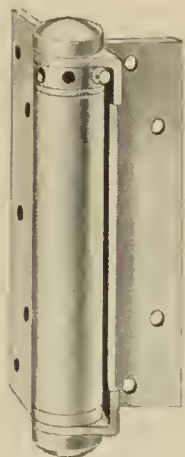
SPRING HINGES

Chicago "Triplex" Spring Hinges

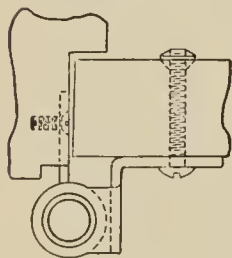
Chicago "Triplex" Half Surface Spring Hinges Single Acting

For Pressed Steel Jamb and Metal Covered Doors

Designed for Application to Metal Covered Doors, Used as Fire Exits



Type HS2002—Steel
Type HS2052—Brass
or Bronze Metal



STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.	
Bronze, Dull....."	F10		
Zinc, Dull....."	F2G		
Nickel, Bright....."	F14		

Size and Specifications

Length of Flange	Thickness of Door	Screws for Jamb Flange	†Bolts for Door Flange	Approx. Weight Per Pair
4 inches	1 1/8 in.	8—32 x 1/2 in.	10—24—1/2 in.	2 lbs.
6 inches	1 3/4 in.	10—24 x 1/2 in.	1/4—20—2 1/4 in.	5 1/8 lbs.
7 inches	1 3/4 in.	12—24 x 1/2 in.	1/4—20—2 1/4 in.	6 1/8 lbs.

†The 6 inch and 7 inch hinges are supplied with flat head machine screws for the jamb flange, and round head machine screws with grommet nuts for door flange. The 4 inch hinge is supplied with flat head machine screws for jamb flange and round head machine screws without nuts for door flange.

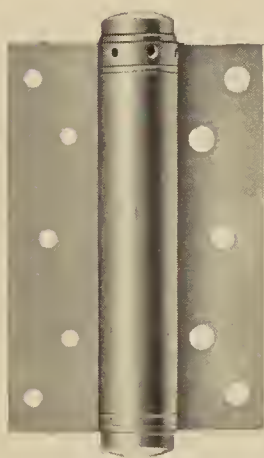
NOTE—Specify by the type, finish symbol and size. Example:—Type HS2002—FP—6 in.

Packed one pair in a box with bolts and screws and tension adjuster.

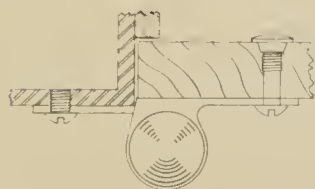
Chicago "Triplex" Full Surface Spring Hinges Single Acting

For Structural Steel Jamb and Metal Covered Doors

Designed for Application to Metal Covered Doors, Used as Fire Exits



Type FS2002—Steel
Type FS2052—Brass
or Bronze Metal



STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	The concealed hardened steel bearings are specially desirable for brass or bronze metal hinges.	
Bronze, Dull....."	F10		
Zinc, Dull....."	F2G		
Nickel, Bright....."	F14		

Size and Specifications

Length of Flange	Flanges Offset	Thickness of Door	Screws for Jamb Flange	†Bolts for Door Flange	Approx. Weight Per Pair
6 inches	1/8 in.	1 3/4 in.	10—24 x 1/2 in.	1/4—20—2 1/4 in.	5 lbs.
7 inches	1/8 in.	1 3/4 in.	12—24 x 1/2 in.	1/4—20—2 1/4 in.	5 1/2 lbs.

†These hinges supplied with round head machine screws for jamb flange and round head machine screws with grommet nuts for door flange, unless otherwise specified.

NOTE—Specify by type, finish symbol and size. Example:—Type FS2002—FP—6 in.

Packed one pair in a box, with bolts and screws and tension adjuster.

Chicago "Hi-Duty" Spring Butt-Hinge

Double Acting

For Extra Heavy Doors in Trucking Doorways

Spring Steel Buffers Illustrated on Page 43



Specially Constructed For High Duty Conditions And To Resist Violent Use

Many Architects and Engineers do not realize the amount of abuse given to hinges where trucks pass through a doorway. Unless a specially constructed hinge for this purpose is specified, the repair expense is continual.

Where hinges are in operation that continually require repairs, it is economy to promptly replace them with specially constructed "Hi-Duty" Spring Hinges.

The spring of this hinge is located between the door and jamb so it is protected from trucks as they pass through the doorway.

The hinge has a multiple of large bearings to carry the weight of the door and the pins are securely held in place by a pin locking device. The clamp flange is an integral part of the hinge.

The entire construction is of heavy, cast, special process malleable iron and will resist excessive violence.

This hinge has two axes which permits opening the door 180 degrees. It is preferable to a pivot hinge which brings the door in contact with the frame before it is entirely open and usually results in damage.

Although this is a two axis hinge the spring chamber is between the door and jamb and does not project beyond the surface of the door.



Type CS1
"Hi-Duty" Spring
Hinge

Chicago "Hi-Duty" Spring Butt-Hinges

Double Acting

No Hanging Strip Required

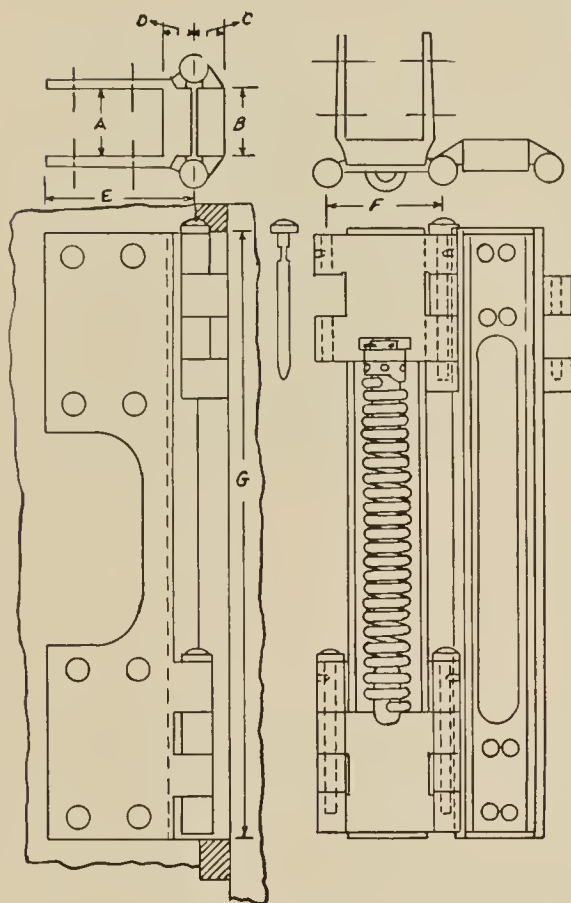
For Extra Heavy Doors in Trucking Doorways

Right or Left Hand

Features

Heavy Cast Malleable Iron

Clamp Flange Integral Part of Hinge



Type CS1
 "Hi-Duty" Spring Hinge

CAST MALLEABLE IRON UNPOLISHED		Finish Symbol
Dead Black.....	Japanned	F1D
Primed.....	For Painting	FP
Zinc, Dull.....	Plated	F2G
Zinc, Natural Finish.....	Hot Dipped	F2H

Packed in a box with hexagonal head bolts and nuts for clamp flange and machine screws for jamb flange, unless otherwise specified.

Specify by the type, finish symbol and size, also give exact door thickness
 Example:—Type CS1-F1D-B (Door thickness 2 in.).

The application is simplified and more secure by fastening the jamb flange direct to the jamb without a jamb strip. Mortise the door flange into the door to depth D and fill the space between the door and jamb with a filler strip of thickness C.

Hinge Sizes, Dimensions and Weights

(Template blue print sent on request)

Hinge Size	Maximum Door Thickness A	Approximate Dimensions—In Inches						Approximate Weight Per Pair
		B	C	D	E	F	G	
A	1 3/4 in.	1 3/4	7/8	27/32	327/32	29/16	15 3/4	30 lbs.
B	2 1/4 in.	2 1/4	1	1 1/8	4 1/8	3 5/32	20 5/16	56 lbs.
C	2 3/4 in.	2 3/4	1 1/8	1 1/8	4 1/8	3 5/8	23 3/8	75 lbs.

Specify exact thickness of door so shims can be supplied for the clamp flange, if door is less than dimension A.

Specification Schedule

Hinge Size	Maximum Door Thickness	Number of Hinges for Each Door	Door			Remarks
			Maximum Width	Height	Maximum Weight	
A	1 3/4 in.	2 Hinges	3 ft.	8 to 9 ft.	265 lbs.	If doors are wider, higher or heavier than indicated in the schedule, send complete information and recommendations will be given.
A	1 3/4 in.	3 Hinges	4 ft.	8 to 9 ft.	320 lbs.	
B	2 1/4 in.	2 Hinges	3 ft.	8 to 9 ft.	370 lbs.	
B	2 1/4 in.	3 Hinges	4 ft.	8 to 9 ft.	430 lbs.	
C	2 3/4 in.	2 Hinges	3 ft.	8 to 9 ft.	460 lbs.	
C	2 3/4 in.	3 Hinges	4 ft.	8 to 9 ft.	535 lbs.	

When estimating the weight of doors BE SURE to include (with the exception of hinges) all hardware, metal plates and buffers

For hollow metal doors or wood doors over 3 ft. wide with heavy metal plates, we recommend three hinges for each door to avoid possible sagging. The third hinge should be placed near the top hinge, but allow space for pin removal.

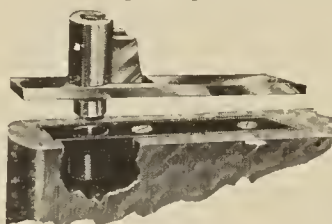
The use of Hi-Duty Spring Steel Buffers will in most installations protect the door without use of heavy metal plates. This will reduce the weight of the door and load on the hinges. Spring Steel Buffers illustrated on Page 43.

Chicago "Relax" Spring Pivot-Hinges

Ball-Bearing



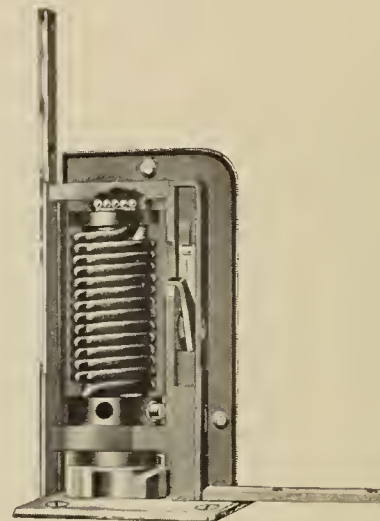
Plunger Top Pivot



Top Socket



Jamb Attaching Plate



Double Acting

Type 6001—Steel

Type 6051—Brass or Bronze Metal

Spring Action Release

This hinge has a spring action release which disengages the spring action.

This feature eliminates the tendency of the spring to lose its power as a result of remaining fixed at high tension when doors are held open by door holders.

By stepping on the lever, which is in a recess of the side plate, the spring action disengages and the door remains open wherever it is placed. Whenever the door passes over the closed position, the spring action automatically re-engages. The "Relax" surpasses other pivot type hinges for quality, quietness and satisfactory service.

The construction is very substantial with ball-bearings to carry the weight of the door. The spring is large and has a tension adjustment. The application is very simple and economical.

The "Plunger Top Pivot" is always furnished with this hinge, permitting the door to be readily taken down without removing screws and allowing full clearance of doorway.

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15	To order with Jamb Attaching Plates (for concrete or tile floor) prefix "J" to Type Number. See Price Book for extra cost.	
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

SIZE AND SPECIFICATIONS

Size of Hinge.....	A	B	C	Large doors, or doors subject to draft, require largest hinge the thickness of door will allow.
Thickness of Door, Inches.....	1 1/8 to 1 1/2	1 1/2 to 2	1 3/4 to 2 3/4	
Approximate Weight Per Set, Pounds.....	5 1/4	7 1/4	12 3/8	These weights include the wrapping and box but not the packing and shipping container. For approxi- mate gross weight, add 3 1/2%.

NOTE: Specify by the type, finish symbol and size. Example: —Type 6001—F4—A.

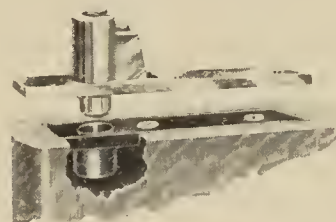
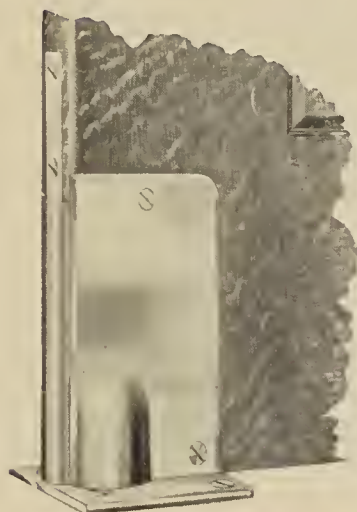
The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box, with screws of same finish, tension adjuster and instructions for applying.

Repair parts, page 48.

Chicago "Silentex" Spring Pivot-Hinges Ball-Bearing

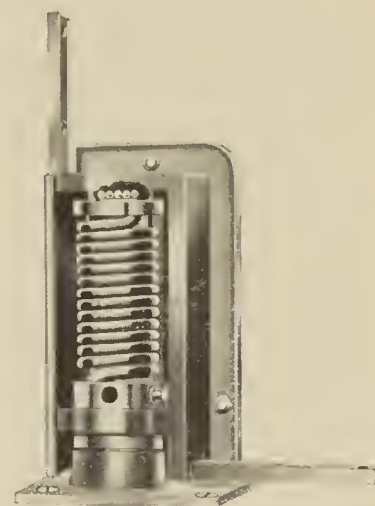
Plunger Top Pivot



Top Socket



Jamb Attaching Plate



Double Acting

Type 16001—Steel

Type 16051—Brass or Bronze Metal

Silent Action

This hinge has the same general design and construction as the "Relax" (Type 6001). It does not have the spring action release feature which permits placing the door open at any desired position.

Under certain conditions it may be more desirable to use this hinge which has no release or hold open feature.

This hinge has ball-bearings to carry the weight of the door, a tension adjustment and operates quietly, slowly and with few oscillations.

The "Plunger Top Pivot" is always furnished with this hinge, permitting economy in applying and fitting the door with a minimum space between the top of the door and frame.

STEEL, PLANISHED (Finish Description Page 6)		Finish Symbol	BRASS OR BRONZE METAL POLISHED		Finish Symbol
Dead Black.....	Japanned	F1D	Brass Metal, Bright.....		F3
Primed.....	For Painting	FP	Brass " Dull.....		F4
Brass, Bright.....	Plated	F3	Bronze " Bright.....		F9
Brass, Dull.....	"	F4	Bronze " Dull.....		F10
Bronze, Bright.....	"	F9	Brass " Bright Nickel.....	Plated	F14
Bronze, Dull.....	"	F10	Brass " Dull Nickel.....	"	F15
Zinc, Dull.....	"	F2G	Brass " Bright Chromium.....	"	F26
Nickel, Bright.....	"	F14	Brass " Dull Chromium.....	"	F26D
Nickel, Dull.....	"	F15	To order with Jamb Attaching Plates (for concrete or tile floor) prefix "J" to Type Number. See Price Book for extra cost.		
Chromium, Bright.....	"	F26			
Chromium, Dull.....	"	F26D			

SIZE AND SPECIFICATIONS

Size of Hinge	A	B	C	Large doors, or doors subject to draft, require largest hinge the thickness of door will allow.
Thickness of Door, Inches	1 $\frac{1}{8}$ to 1 $\frac{1}{2}$	1 $\frac{1}{2}$ to 2	1 $\frac{3}{4}$ to 2 $\frac{3}{4}$	
Approximate Weight Per Set, Pounds.....	4 $\frac{7}{8}$	6 $\frac{7}{8}$	12 $\frac{1}{8}$	These weights include the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3 $\frac{1}{2}$ ¢.

NOTE:—Specify by the type, finish symbol and size. Example:—Type 16001—F4—A.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box with screws of same finish, tension adjuster and instructions for applying.

Repair parts, page 48.

Chicago "Premier" Spring Pivot-Hinges

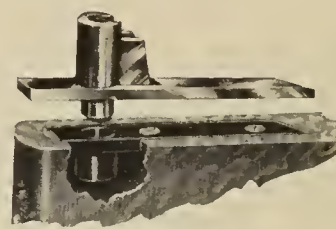
Ball-Bearing



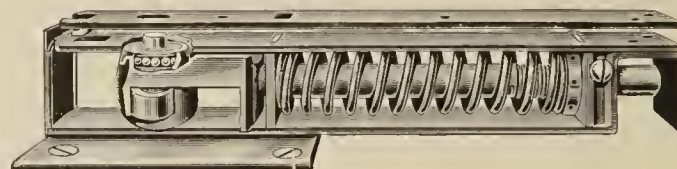
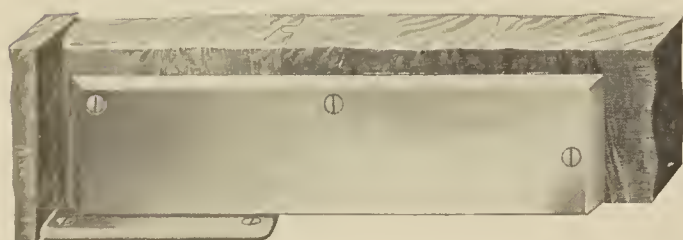
Standard Top Pivot and Socket



Jamb Attaching Plate
Part of J4001 Hinge
Not Supplied Separately



Plunger Top Pivot and Socket
(See Note Below)



Double Acting

Type 4001—Steel

Type 4051—Brass or Bronze Metal

Hold Open Feature

When the door is opened to 90 degrees, this hinge holds it in that position. Other features of this hinge are an eccentric equipped with hardened steel roller-bearings, a drop-forged piston and a simple but positive alignment device controlled by a single screw.

The springs have great durability and are made of flat wire of the best grade of tempered steel and provided with a tension adjustment. The weight of the door is carried on ball-bearings located at the top of hinge away from moisture and dust.

Application of the attaching plate and hinge to the bottom of the door is very simple and requires only a rectangular mortise cut.

The "Plunger Top Pivot" is supplied for special orders. It simplifies application and permits closer fitting at the top of the door.

STEEL, PLAINISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15	To order with Jamb Attaching Plates (for concrete or tile floor) prefix "J" to Type Number. See Price Book for extra cost.	
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

SIZE AND SPECIFICATIONS

Size of Hinge	A	B	
Thickness of Door, Inches	1 $\frac{1}{8}$ to 1 $\frac{3}{4}$	1 $\frac{3}{4}$ to 2 $\frac{3}{4}$	Size 1 $\frac{1}{8}$ to 1 $\frac{3}{4}$ supplied with reversible side plates.
Approximate Weight Per Set, Pounds.....	4 $\frac{1}{4}$	7 $\frac{7}{8}$	These weights include the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3%.

NOTE:—Specify by the type, finish symbol and size. Example: Type 4001—F4—A.

Plunger top pivot and socket is supplied for special orders. See price book for cost.

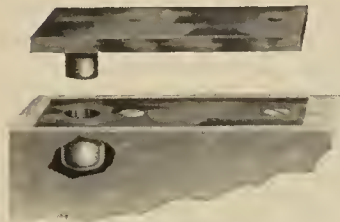
The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box, with screws of same finish, tension adjuster and instructions for applying.

SPRING HINGES

Chicago "Ajax" Spring Pivot-Hinges

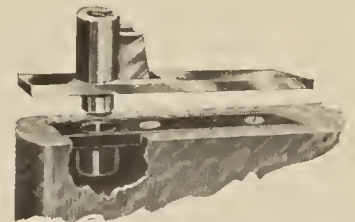
Ball-Bearing
Reversible Side Plates



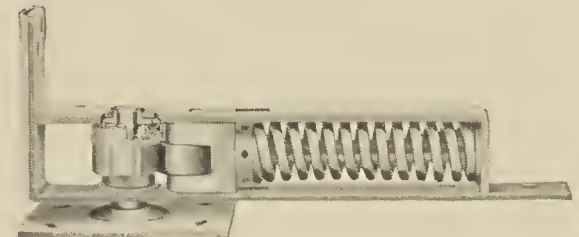
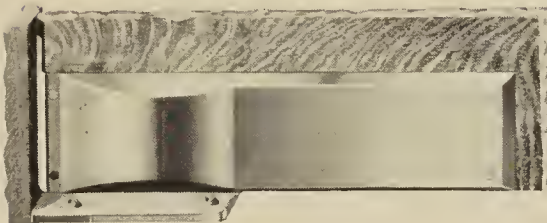
Standard Top Pivot
and Socket



Jamb Attaching Plate
(Supplied Separately)



Plunger Top Pivot and Socket
(See Note Below)



Double Acting
Type 3001—Steel
Type 3051—Brass or Bronze Metal*

Hold Open Feature

When the door is opened to 90 degrees, this hinge holds it in that position. The weight of the door is carried on ball-bearings which are located at the top of the hinge, away from moisture and dust. The piston head has a roller-bearing to contact the pintle.

The alignment is simple, positive and readily accessible. Slotted screw holes in the floor plate permit moving it to align the door with the door frame.

The spring tension is adjustable.

The "Plunger Top Pivot" is supplied for special orders. It simplifies application and permits closer fitting at the top of door.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....Japanned	F1D	Brass Metal, Bright.....	F3
Primed.....For Painting	FP	Brass " Dull.....	F4
Brass, Bright.....Plated	F3	Bronze " Bright.....	F9
Brass, Dull....."	F4	Bronze " Dull.....	F10
Bronze, Bright....."	F9	Brass " Bright Nickel.....Plated	F14
Bronze, Dull....."	F10	Brass " Dull Nickel....."	F15
Zinc, Dull....."	F2G	Brass " Bright Chromium....."	F26
Nickel, Bright....."	F14	Brass " Dull Chromium....."	F26D
Nickel, Dull....."	F15	To order with Jamb Attaching Plates (for concrete or tile floor) prefix "J" to Type Number. See Price Book for extra cost.	
Chromium, Bright....."	F26		
Chromium, Dull....."	F26D		

SIZE AND SPECIFICATIONS

Thickness of Door, Inches	1 1/8 to 1 3/4	Supplied with reversible side plates.
Approximate Weight Per Set, Pounds	3	This weight includes the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3%.

NOTE:—Specify by the type, finish symbol and size. Example:—Type 3001—F4—1 1/8 to 1 3/4 in.

Plunger top pivot and socket is supplied for special orders. See price book for cost.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box, with screws of same finish, tension adjuster and instructions for applying.

Standard packing is 25 sets in a case.

Chicago "Durex" Spring Pivot-Hinges

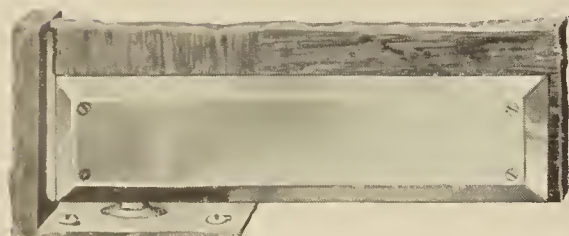
Ball-Bearing
 Reversible Side Plates



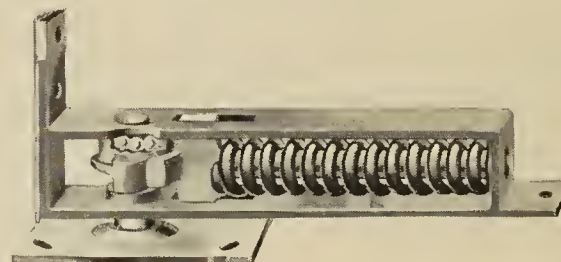
Standard Top Pivot
 and Socket



Jamb Attaching Plate
 (Supplied Separately)



Double Acting
 Type 17001—Steel



Hold Open Feature

When the door is opened to 90 degrees, this hinge holds it in that position. At an open position of approximately 95 degrees the hold-open feature is most rigid.

Ball-bearings, which are located at the top of the hinge away from moisture and dust, carry the weight of the door and also protect the bearings in the frame from the thrust of the spring.

The compression spring is made of high grade tempered steel wire.

An alignment feature is provided by means of slotted screw holes in the floor plate, so that the position of the door may be adjusted to align with the door frame.

Top pivot and socket supplied with this hinge are made of wrought metal and the attaching part is thin enough so that it is not necessary to mortise the top pivot into the casing or the attaching part of the socket into the door. If desired, however, a mortise cut may be quickly made with a bit.

Reversible, beveled side plates are supplied and may be applied to either side of the door. This is convenient when different finishes are required to match other hardware in the rooms on either side of the door. In many instances this feature permits using stock goods where a combination finish is required.

For a hinge with adjustable tension and roller-bearings, we recommend the "Premier" or "Ajax" Spring Pivot-Hinge.

STEEL, PLAINISHED (Finish Description Page 6)	Finish Symbol	STEEL, PLAINISHED (Finish Description Page 6)	Finish Symbol
Dead Black.....	F1D	Nickel, Bright.....	F14
Primed.....	FP	Nickel, Dull.....	F15
Brass, Bright.....	F3	Chromium, Bright.....	F26
Brass, Dull.....	F4	Chromium, Dull.....	F26D
Bronze, Bright.....	F9	To order with Jamb Attaching Plates (for concrete or tile floor) prefix "J" to Type Number. See Price Book for extra cost.	
Bronze, Dull.....	F10		
Zinc, Dull.....	F2G		

SIZE AND SPECIFICATIONS

Thickness of Door, Inches	1 1/8 to 1 3/4	Supplied with reversible side plates.
Approximate Weight Per Set, Pounds	2 1/2	This weight includes the wrapping and box but not the packing and shipping container. For approximate gross weight, add 3 1/2.

NOTE:—Specify by the type, finish symbol and size. Example:—Type 17001—F4—1 1/8 to 1 3/4 in.

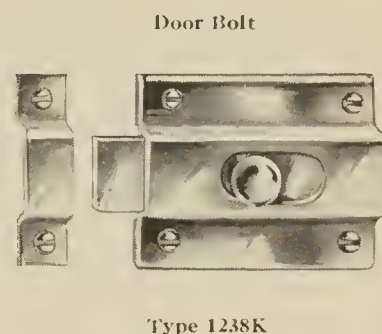
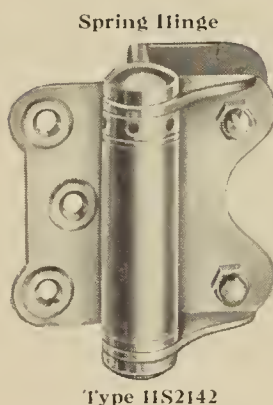
The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box, with screws of same finish and instructions for applying.

Standard packing is 25 sets in a case.

SPRING HINGES

Plywood Door Hardware Lavatory Stall Door Spring Hinges Door Stops And Door Bolts



Polished Brass or Bronze Metal—Nickel or Chromium Plated
For Right or Left Hand Doors, Opening In or Out

HS2142—3-in. Flange
Weight, Pair 2¼ lbs.

1247F—With Keeper for Type 1238 Bolt
1247G—With Keeper for Type 1238 Bolt
Other Stops and Bolts Pages 35 and 36

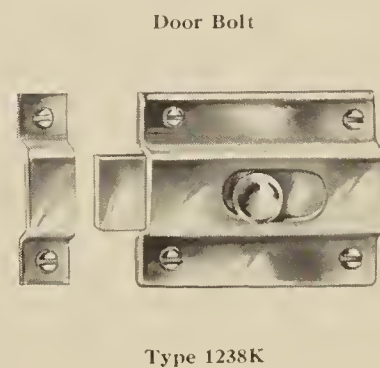
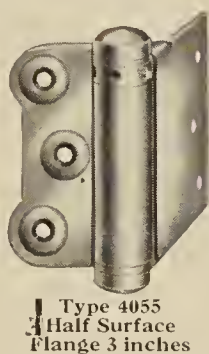
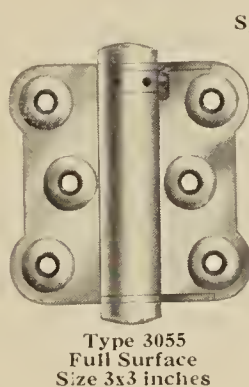
1238 Without Keeper
1238K With Keeper
Plate 2x2½" Bar ¾x¾x16"

Type HS2142 Spring Hinge

(Adjustable Clamp Flange for Marble Stile—Surface Flange for Plywood Doors)

This spring hinge, with clamp flange, is specially designed for use with Plywood Doors. The door flange can be applied to the surface of the door with wood screws or, when so specified, machine screws with washers and flat hexagon nuts will be furnished. It is not practical to fasten a mortise type flange to the edge of a Plywood Door.

For Wood Stile and Plywood Doors



SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. If required to hold door open, specify "Reverse Acting."

Example:—Type HS2142—F14, Reverse Acting, Stile 1¼ in. Door ¾ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated	F14	Brass Metal, Bright Chromium Plated	F26
Brass Metal, Dull Nickel Plated	F15	Brass Metal, Dull Chromium Plated	F26D

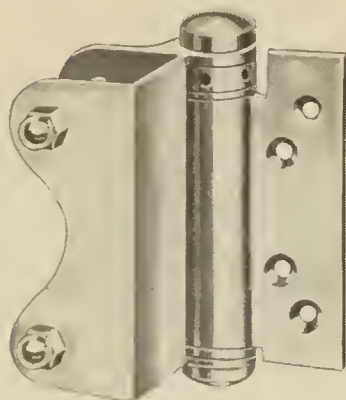
The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description Page 6.
Packed complete with bolts or screws of same finish.

SPRING HINGES

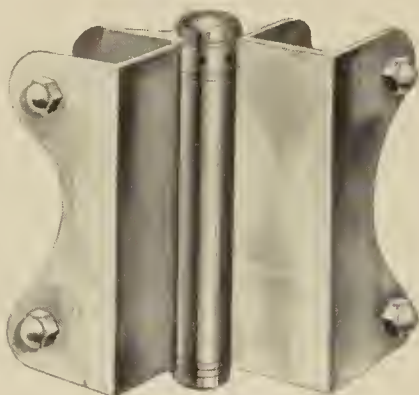
Chicago "Triplex" Lavatory Spring Hinges

Clamp Flanges for Application to Marble or Glass

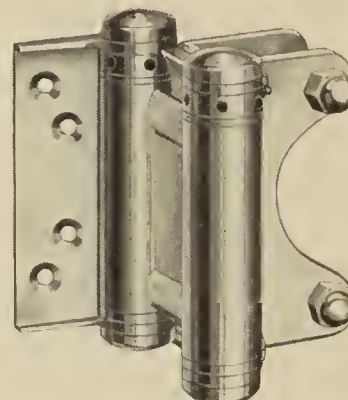
For Partitions with Stile



Type 2242*
Single Acting
Adjustable
Clamp Flange



Type 2242A
Single Acting
Adjustable
Clamp Flanges



Type 2241
Double Acting
Non-Adjustable
Clamp Flange

Polished Brass or Bronze Metal—Nickel or Chromium Plated

For Right or Left Hand Doors, Opening In or Out

2242—4 in. flange, Wt., Pr. 27 $\frac{7}{8}$ lbs.
2142—3 in. flange, Wt., Pr. 21 $\frac{1}{4}$ lbs.

The 2142 is same type as 2242.

2242A—4 in. flange, Wt., Pr. 41 $\frac{1}{8}$ lbs.

The 2242A has two clamp flanges.

2241—4 in. flange, Wt., Pr. 43 $\frac{1}{4}$ lbs.

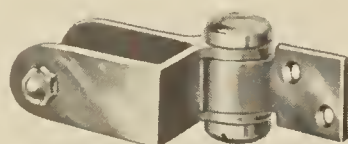
2241A—4 in. flange, Wt., Pr. 6 lbs.

The 2241A has two clamp flanges.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Lavatory Springless Hinges—For Use with Spring Hinges

Adjustable
Clamp Flange



Type 2244*

2242-2244—Spring and springless hinge. Wt.,
Set. 2 lbs.
2244—Springless hinge. Wt., Pr. 1 lb.

Adjustable
Clamp Flanges



Type 2244A

2242A-2244A—Spring and springless hinge. Wt.,
Set. 3 lbs.
2244A—Springless hinge. Wt., Pr. 1 $\frac{3}{4}$ lbs.

If Single Acting Doors are narrow and light, a Spring and Springless Hinge can be used satisfactorily. If doors are heavy or equipped with pay locks, always use a pair of Spring Hinges.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. If required to hold door open, specify "Reverse Acting."

Example:—Type 2242—F14, Reverse Acting, Stile 1 $\frac{1}{4}$ in. Door 1 $\frac{1}{8}$ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated	F14	Brass Metal, Bright Chromium Plated	F26
Brass Metal, Dull Nickel Plated	F15	Brass Metal, Dull Chromium Plated	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

Nos. 2242, 2142, 2242A, 2244 and 2244A have adjustable clamp flanges and open head nuts on bolts, permitting adjustment of $\frac{1}{8}$ inch under and over the following sizes by which they are specified: 1 in., 1 $\frac{1}{4}$ in., 1 $\frac{1}{2}$ in., 1 $\frac{3}{4}$ in. and 2 in.

Closed head nuts can be supplied for adjustable clamp flanges, but they are not practical if thickness of stile varies.

Packed one pair or set in a box, with bolts and screws of same finish and tension adjuster.

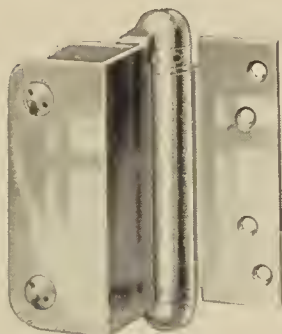
SPRING HINGES

Lavatory Door Spring Hinges and Stops

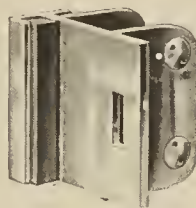
Clamp Flanges for Application to Marble or Glass

For Partitions with Stile

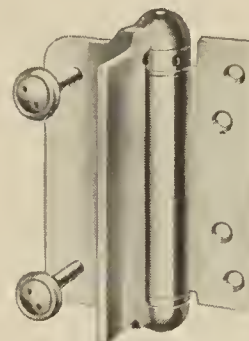
Heavy Cast Metal Type



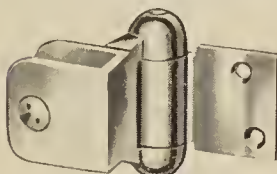
Type 3242
Single Acting
Adjustable Clamp Flange



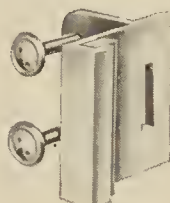
Type 3247F
Adjustable
Clamp Flange



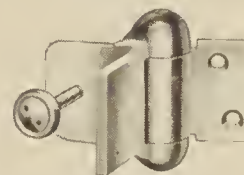
Type 3242½
Single Acting
Angle Flange



Type 3244
Springless Hinge
Adjustable Clamp Flange



Type 3247½F
Angle Flange



Type 3244½
Springless Hinge
Angle Flange

Polished Brass or Bronze Metal—Nickel or Chromium Plated

For Right or Left Hand Doors, Opening In or Out

3242—4 in. flange. Weight, Pair.....	3½ lbs.	3242½—4 in. flange. Weight, Pair.....	3 lbs.
3244 Weight, Pair.....	1⅝ lbs.	3244½ Weight, Pair.....	1¼ lbs.
3242—3244 Weight, Set.....	2½ lbs.	3242½—3244½ Weight, Set.....	1⅞ lbs.

Types 3242, 3242½, 3244 and 3244½ hinges have single thickness of metal between door and stile, reducing gap between them and increasing privacy. The surfaces of the clamp flange on Types 3242 and 3244 are unbroken by joints, holes or screws, easily cleaned and of neat appearance. The clamp adjustment is concealed behind spring barrel.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. If required to hold door open, specify "Reverse Acting."

Example:—Type 3242—F14, Reverse Acting, Stile 1¼ in. Door 1⅞ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

When angle flange hinge and door stop are used almost all hardware, except the fastening screw heads and washers, is concealed within the stall.

Clamp and Angle Flange Door Stops with Keepers

Heavy Cast Metal Type

Door Stops, with Suitable Door Bolts and Latches

(Door Bolts and Latches, Page 36)

3247F—With keeper for 1250, 1244, 1236, 1238, 1240.....	(Doors open In).....	Clamp flange
3247½F—With keeper for 1250, 1244, 1236, 1238, 1240.....	(Doors open In).....	Angle flange
3247C—With keeper for 1242, 1252.....	(Doors open In).....	Clamp flange
3247½C—With keeper for 1242, 1252.....	(Doors open In).....	Angle flange
3247D—With keeper for 1254.....	(Doors open In or Out).....	Clamp flange
3247½D—With keeper for 1254.....	(Doors open In or Out).....	Angle flange

When ordering, specify as indicated above for specifying Spring Hinges.

Nos. 3242 and 3244 hinges also 3247 Series Door Stops have adjustable clamp flange providing adjustment of 1/16 inch under or over the following sizes: 1 in., 1⅞ in., 1¼ in.

Packed: Hinges, one pair or set in a box, with bolts and screws of same finish and tension adjuster; Stops, one in box with bolts of same finish.

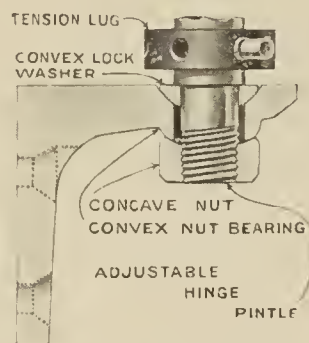
“Sagless” Lavatory Spring Pivot-Hinges

Single or Double Acting

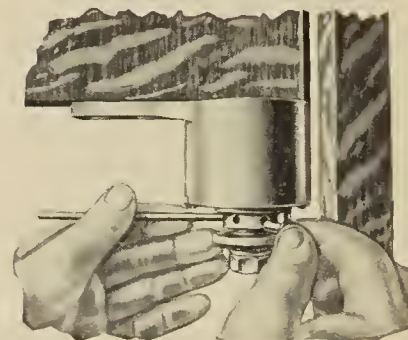
Ball-Bearing



Type C4227
Spring Hinge



Alignment
Feature



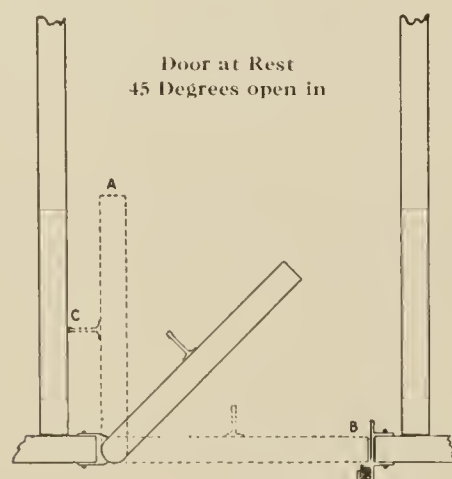
Exterior
Tension Adjustment

Checking Feature

Quiet Action—No Slam

An adjustable pintle permits setting the door so it will come to rest at 45 degrees open in. When installed in this manner the door swinging from either an opened or closed position, meets resistance from the spring as soon as it passes the “rest position” (45 degrees open in) and this checks the action of the door and prevents it striking the partition or stop. See diagram below.

It is economical to use Chicago Sagless Spring Pivot-Hinges as they will operate as noiselessly as any door hung with more expensive checking hinges. The Type 4227 Series, with exterior tension adjustment, are particularly well suited for this type of application.



No Slam

A door released from position “A” will not strike at “B” nor will a door released from “B” swing beyond position “A” to cause the bumper to strike at “C.”

Expensive checking hinges accomplish no more and may require the expense of frequent adjustment and maintenance.

Alignment

An adjustable hinge pintle, with ball and socket alignment, permits aligning the pintle vertically with the top pivot. This gives free and easy movement of the door.

Economy

Use Chicago “Sagless” Lavatory Spring Pivot-Hinges and save on original cost and also on maintenance expense.

SPRING HINGES

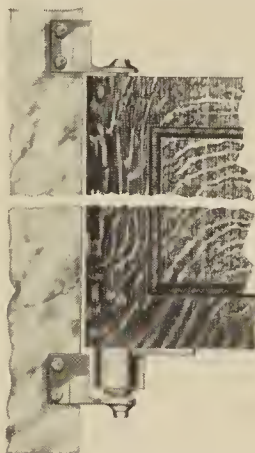
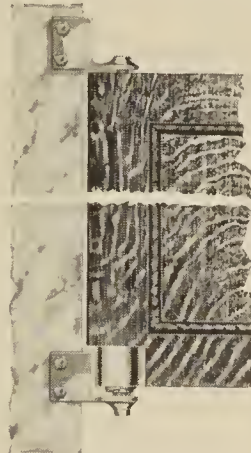
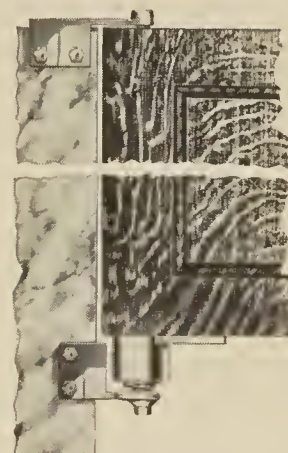
“Sagless” Lavatory Spring Pivot-Hinges

Ball-Bearing Hinge and Top Socket

Single or Double Acting

Attachments for Application to Marble, Glass, Wood or Metal

Polished Brass or Bronze Metal—Nickel or Chromium Plated

Type C4227
Adjustable Clamp FlangeType A4227*
Adjustable Clamp FlangeType A4227M
Adjustable Clamp FlangeType AD4227
Top of Door and Stile Flush

Specify “Hand” of door, if clamp flange adjustment is desired on inside of stile.
Approximate weight of Clamp Flange Hinges, 4¼ lbs. per set.

Special Attachments

To specify, prefix B, F or P to number 4227.

Type “B” Attachment
Inverted ClampType “F” Attachment
For Flat SurfaceType “P” Attachment
For Pipe**Special Features**

The pintle of the hinge is adjustable in the bottom attachment and after the door is hung it can be set to come to rest in any desired open position or to close the door. The door is center hung to edge of stile.

Type A attachments require less clearance under door than Type C and Type A4227M very little clearance, but requires mortising door. Type AD permits hanging top of door flush with top of stile and requires minimum space between the door and stile.

All types of attachments can be supplied with hinge to mortise in the door. Specified by adding suffix “M” to the type symbol.

If stall doors are heavy or if required for double acting dwarf vestibule doors, we recommend this hinge as it has a large spring with exterior tension adjustment. It also has the important feature of a ball-bearing top socket.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. Example:—Type C4227—F14—Stile 1¼ in. Door 1½ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

The clamp attachments illustrated, except Type AD4227, have an adjustable side plate with open head nuts on bolts, permitting adjustment ½ inch under and over the following sizes by which they are specified:—1 in., 1¼ in., 1½ in., 1¾ in., and 2 in. The attachments are made so that the adjustable side plate can be located on the inside of the stile if hand of door is specified. See page 6.

Type “F” attachment is 1½ in. wide. Other widths to special order. Type “P” attachment requires specifying outside diameter of pipe.

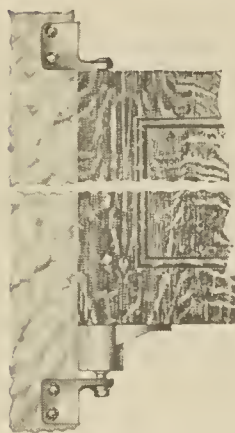
Closed head nuts can be supplied for adjustable clamp flanges, but they are not practical if thickness of stile varies.

Packed one set in a box with bolts and screws of same finish.

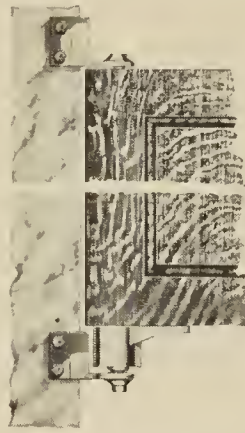
"Sagless" Lavatory Spring Pivot-Hinges

Ball-Bearing
 Single or Double Acting

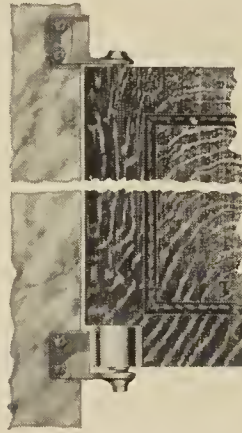
Attachments for Application to Marble, Glass, Wood or Metal
 Polished Brass or Bronze Metal—Nickel or Chromium Plated



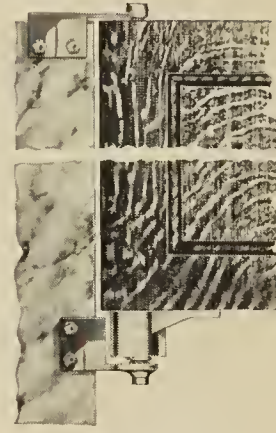
Type C7227
 Adjustable Clamp Flange



Type A7227
 Adjustable Clamp Flange



Type A7227M
 Adjustable Clamp Flange



Type AD7227
 Top of Door and Stile Flush

For Type A or Type AD attachments, specify "Hand" of door, if clamp flange adjustment is desired on inside of stile.
 Approximate weight of Clamp Flange Hinges, $3\frac{1}{8}$ lbs. per set.

Special Attachments

To specify, prefix B, F or P to number 7227.



Type "B" Attachment
 Inverted Clamp



Type "F" Attachment
 For Flat Surface



Type "P" Attachment
 For Pipe

Special Features

The pintle of the hinge is adjustable in the bottom attachment and after the door is hung it can be set to come to rest in any desired open position or to close the door. The door is center hung to edge of stile.

Type A attachments require less clearance under door than Type C and Type A7227M very little clearance, but requires mortising door. Type AD permits hanging top of door flush with top of stile and requires minimum space between the door and stile.

All types of attachments can be supplied with hinge to mortise in the door. Specified by adding suffix "M" to the type symbol.

These hinges are suitable for stall doors. If doors are heavy or double acting dwarf vestibule doors, we recommend Type 4227 illustrated on previous page. They have a heavier spring with exterior tension adjustment.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. Example:—Type C7227—F14—Stile $1\frac{1}{4}$ in. Door $1\frac{1}{8}$ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

The clamp attachments illustrated, except Type AD7227, have an adjustable side plate with open head nuts on bolts, permitting adjustment $\frac{1}{8}$ inch under and over the following sizes by which they are specified:—1 in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., $1\frac{3}{4}$ in., and 2 in. The attachments are made so that the adjustable side plate can be located on the inside of the stile if hand of door is specified. See page 6.

Type "F" attachment is $1\frac{1}{4}$ in. wide. Other widths to special order. Type "P" attachment requires specifying outside diameter of pipe.

Closed head nuts can be supplied for adjustable clamp flanges, but they are not practical if thickness of stile varies.

Packed one set in a box with bolts and screws of same finish.

Chicago Lavatory Gravity Pivot-Hinges

Ball-Bearing Gravity Roller—Single or Double Acting

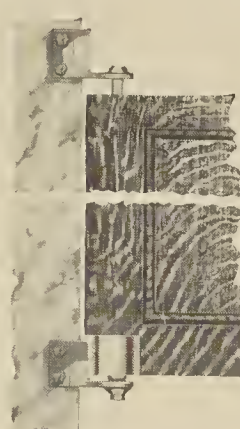
Attachments for Application to Marble, Glass, Wood or Metal
 Polished Brass or Bronze Metal—Nickel or Chromium Plated.



Type C47227
Adjustable Clamp
Flange



Type A47227*
Adjustable Clamp
Flange



Type A47227M



Type AD47227**
(See Note)
Hinge Applied to Open Door

*Type A47227 hinges can be supplied to meet U.S. Government specifications Type 4200. Specify as Type AG47227.

**Type AD47227 hinges can be supplied to meet U.S. Government specifications Type 4202. Specify as Type ADG47227.

See Page 5 for Comparative Type Numbers.

For Type A or AD attachments, specify "Hand" of door, if clamp flange adjustment is desired on inside of stile.

Approximate Weight of Clamp Flange Hinges, 3½ lbs. per Set.

Special Attachments

To specify, prefix B, F or P to number 47227.



Type B Attachment
Inverted Clamp



Type F Attachment
For Flat Surface



Type P Attachment
For Pipe

UNPOLISHED IRON METAL

Type FMF47227

Dead Black, Japanned FID—Prime Coated FP—Dull Zinc, Plated F2G.

This hinge has the Type "F" attachments and the metal is unpolished.

The pintle of the hinge is adjustable in the bottom attachment and after the door is hung it can be set to come to rest in any desired open position or to close the door. The door is center hung to edge of stile.

Note:—Type AD47227 Gravity Pivot Hinges raise and lower the door as it moves from one position to another, therefore, the top of door will not be flush with top of stile in all positions. Spring Pivot Hinges do not raise or lower the door. It is important, when applying all types of gravity hinges, to provide sufficient space between top of door and top attachment to allow for maximum rise of door when moved from rest position to closed or extreme open position, whichever is greater.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of stile and door. Example:—Type C47227-F14-Stile 1¼ in. Door 1½ in.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated	F14	Brass Metal, Bright Chromium Plated	F26
Brass Metal, Dull Nickel Plated	F15	Brass Metal, Dull Chromium Plated	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

The clamp attachments illustrated, except Type AD47227, have an adjustable side plate with open head nuts on bolts, permitting adjustment ⅛ inch under and over the following sizes by which they are specified:—1 in., 1¼ in., 1½ in., 1¾ in., and 2 in. The attachments are made so that the adjustable side plate can be located on the inside of the stile if hand of door is specified. See page 6.

Type "F" attachment is 1¼ in. wide. Other widths to special order. Type P attachment requires specifying outside diameter of pipe.

Closed head nuts can be supplied for adjustable clamp flanges, but they are not practical if thickness of stile varies.

Packed one set in a box with bolts and screws of same finish.

SPRING HINGES

Concealed Lavatory Stall Door Spring Hinges Door Stops And Door Bolts

Polished Brass or Bronze Metal—Nickel or Chromium Plated



View From Inside

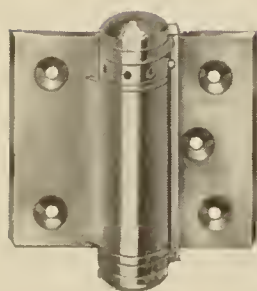
Streamlined
and
Modern

Hardware Concealed
on
Inside of Stall



View From Outside

Top of Door and Stile Flush

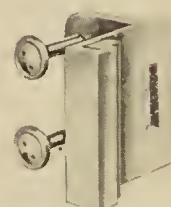


Type 3443
Flange—3 in.

This Spring Hinge is particularly desirable where top of door is flush with top of stile as no hardware projects above the door or stile. For these conditions, a Spring Hinge is preferable to a Gravity Hinge which raises and lowers when operated and the top of door and stile will not remain flush in various open positions of the door.

This is a heavy cast metal Spring Hinge with steel, cadmium treated, concealed bearings. A hinge is applied at top and bottom of door which gives more secure application and larger bearings than pivot type hinges.

The door stop is made of heavy cast metal and is L shaped, so that when the door strikes the stop the pressure is not directly on the fastening bolts of the door stop.



Type 3247 1/2 F
Door Stop with Keeper
Open In

For Right or Left Hand Doors

Furnished with spanner head bolts for stile and wood screws for door, unless otherwise specified.

We recommend a door bolt Type 1250 or Type 1238 with door stop Type 3247 1/2 F.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of the stile and door. If required to hold door open, specify "Reverse Acting." Example:—Type 3443-F14, Reverse Acting, Stile 1 1/4 in., Door 1 1/2 in.

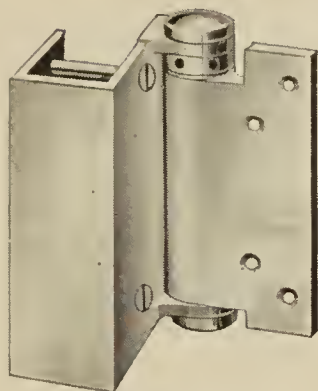
FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.
Hinges packed one pair in a box; Door Stop packed one in a box, with bolts and screws of same finish.

Lavatory Door Spring Hinges

For Partitions without Stile
Non-adjustable Clamp Flanges
Polished Brass or Bronze Metal—Nickel or Chromium Plated



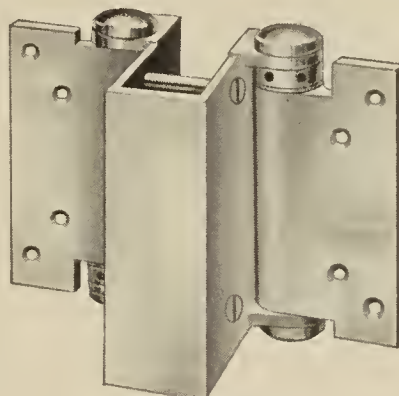
Type 2842*
Single Acting
Right or Left Hand
Doors opening in

2842—4 in. Flange
Weight per Pr. 3 3/8 lbs.



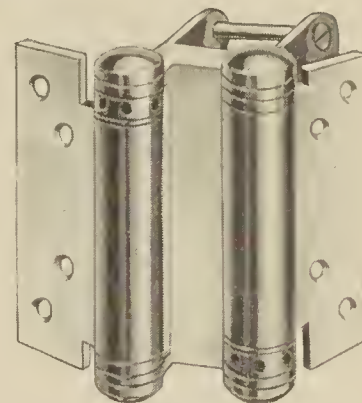
Type 2742
Single Acting
Right or Left Hand
Doors opening out

2742—4 in. Flange
Weight per Pr. 3 3/8 lbs.



Type 2642*
Single Acting
Doors opening in
One door right hand and one door left hand

2642—4 in. Flange
Weight per Pr. 5 1/2 lbs.



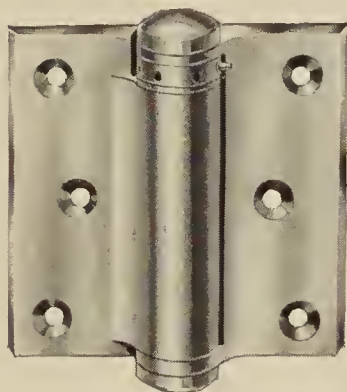
Type 2542
Single Acting
Doors opening out

2542—4 in. Flange
Weight per Pr. 4 1/4 lbs.

*This item can be supplied to meet U. S. Government Specifications. See Page 5 for Comparative Type Numbers.

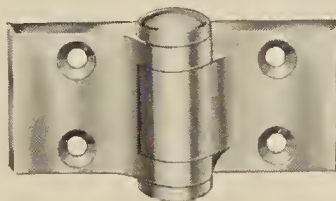
For Surface Application

Polished Brass or Bronze Metal—Nickel or Chromium Plated
Right or Left Hand



Type 2442
Flange—4 in.

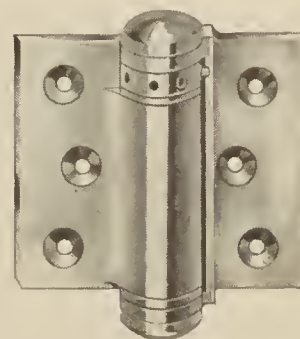
Weight per pair 3 lbs.



Type 2444
Springless Hinge

The Springless Hinge is used
with a Spring Hinge Type 2442
on narrow and light doors.

Weight 2442-2444 per set 2 1/4 lbs.



Type 2443
Flange—3 in.

Weight per pair 2 lbs.

These hinges are furnished with wood screws for both flanges, unless otherwise specified.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol; also the thickness of the stile and door. If required to hold door open, specify "Reverse Acting." Example:—Type 2442-F14, Reverse Acting, Stile 1 1/4 in., Door 1 1/8 in.

FINISHES AND SYMBOLS

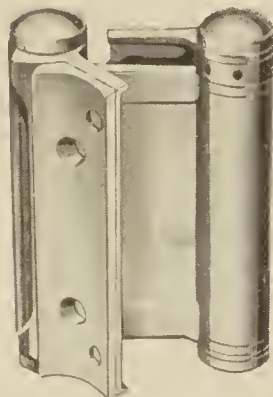
Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.
Packed one pair or set in a box, with bolts and screws of same finish and tension adjuster.

Lavatory Door Spring Hinges

Polished Brass or Bronze Metal—Nickel or Chromium Plated
Right or Left Hand

For Pipe Standards



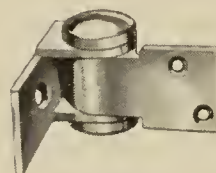
Type P2221
Double Acting
Flange 4 in.



Type P2222
Single Acting
Flange 4 in.

Furnished with machine screws for pipe flange and wood screws for door flange. Always specify outside diameter of pipe.

For Flat Walls

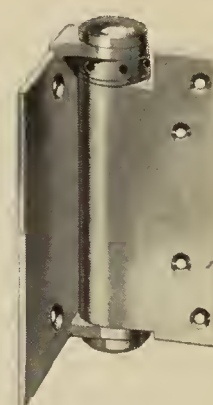


Type F2224
Springless Hinge

The Springless Hinge is used with a Spring Hinge on narrow and light doors.

Furnished with wood screws for both flanges, unless otherwise specified.

If required to hold door open, specify "Reverse Acting."



Type F2222*
Single Acting
Flange 4 in.

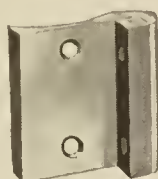
*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Lavatory Door Stops

With Keepers for Door Bolts and Latches

Polished Brass or Bronze Metal—Nickel or Chromium Plated

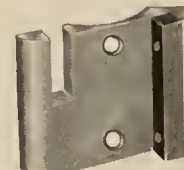
For Application to Pipe Standards



Type 1241



Type 1241F



Type 1241C

1241 Without Keeper.

1241F With Keeper for Rim or Slide Bolt. Doors open in.

1241C With Keeper for Swing Latch. Doors open in. (Specify hand of door.)

Always specify outside diameter of pipe and thickness of door. Also specify width and thickness of bolt bar for items with keeper. Packed complete with machine screws as specified.

For Application to Wood or Metal Stiles



Type 1243



Type 1245



Type 1345C



Type 1345F

1243 Applied to surface of door flush with stile.

1245 Applied to edge of door or stile.

1345C With Keeper for Swing Latch. For doors opening in.

1345F With Keeper for Rim or Slide Bolt. For doors opening in.

1345G With keeper for rim or slide bolt. For doors opening out. (Not illustrated.)

Specify width and thickness of bolt bar for items with keeper. Packed complete with wood or machine screws as specified.

FINISHES AND SYMBOLS

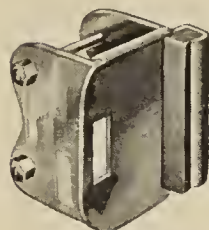
Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.

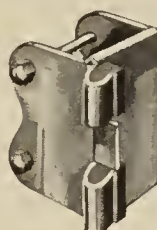
SPRING HINGES

Lavatory Door Stops

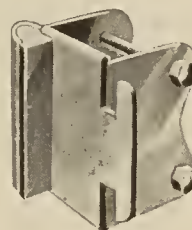
With Keepers for Door Bolts and Latches
Clamp Flanges for Application to Marble and Glass
For Partitions with Stile
Polished Brass or Bronze Metal—Nickel or Chromium Plated



Type 1247F
Open In
For Rim or Slide Bolt



Type 1247G
Open Out
For Rim or Slide Bolt



Type 1247C*
Open In
For Swing Latch



Type 1247H
Open Out
For Swing Latch



Type 1247D
Open In or Out
For Mortise Bolt



Type 1247E
Open In or Out
For Round Mortise Bolt



Type 1247
Open In or Out
Without Keeper



Type 1347D
For Double Acting Doors
Clamp Keeper Only

Door Stops with Suitable Door Bolts and Latches (Door Bolts and Latches, Page 36)

1247F With Keeper for 1250, 1244, 1236, 1238, 1240.
1247G With Keeper for 1250, 1244, 1236, 1238, 1240.
*1247C With Keeper for 1242, 1252.
1247H With Keeper for 1242, 1252.

1247D With Keeper for 1254.
1247E With Keeper for Round Mortise Bolt.
1247 Without Keeper.

1347D Clamp Flange Keeper without Door Stop. Change suffix letter D for other types of Keepers, as illustrated for Type 1247 Series door stops.

These door stops are right or left hand. They have adjustable clamp flanges and open head nuts on bolts, permitting adjustment of $\frac{1}{8}$ in. under and over the following sizes by which they are specified:—1 in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., $1\frac{3}{4}$ in., and 2 in.

Closed head nuts can be supplied for adjustable clamp flanges, but they are not practical if thickness of stile varies.

For Partitions without Stile



Type 1253*
Single Door, Open In



Type D1253*
Two Door, Open In



Type 1251
Single Door, Open Out



Type D1251
Two Door, Open Out

These door stops are right or left hand. The clamp flange is not adjustable. They may be supplied with a cut, to be used as a Keeper for the following door bolts:—

Type 1250, 1244, 1236, 1238, 1240, 1254. See page 36.

Always specify type of door bolt, if required, so proper cut will be made in door stop.

SIZE AND SPECIFICATIONS

When ordering, specify the type, finish symbol and thickness of stile or partition and door. Example:—Type 1247F-F14—Stile $1\frac{1}{4}$ in., Door $1\frac{1}{8}$ in. Cut for Type 1250 Bolt.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

FINISHES AND SYMBOLS

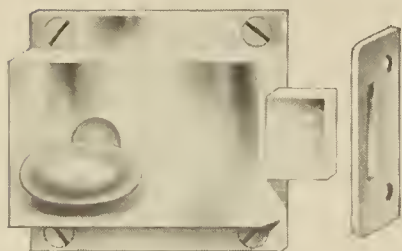
Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6. Packed complete with bolts of same finish.

Lavatory Door Bolts, Latches and Indicators

(Door Stops with Keepers, Indicated Below, are Illustrated on Page 35.)

Polished Brass or Bronze Metal—Nickel or Chromium Plated

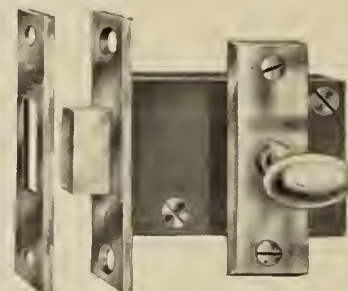


Type 1250K Rim Bolt

*1250, Without Keeper.
1250K, With Keeper.
1250K-1258, With Keeper and Indicator.
Case $2\frac{1}{8} \times 2\frac{3}{8}$ ". Bolt $\frac{7}{8} \times \frac{1}{4}$ ".
Face to Center of Knob $1\frac{5}{8}$ ".
Use Door Stop Type 1247F or 1247G.

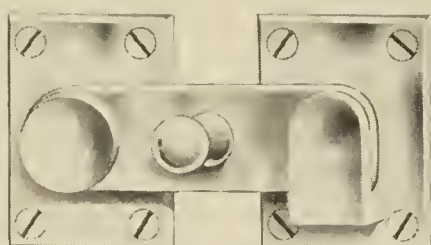


Type 1258 Indicator
Diameter $2\frac{1}{2}$ in.



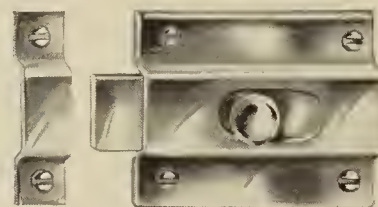
Type 1254K Mortise Bolt

1254, Without Keeper.
1254K, With Keeper.
1254K-1258, With Keeper and Indicator.
Case $1\frac{5}{8} \times 2\frac{5}{8} \times \frac{7}{16}$ ". Front $3 \times \frac{5}{8}$ ". Bolt $\frac{7}{8} \times \frac{1}{4}$ ".
Face to Center of Knob $1\frac{5}{8}$ ".
Use Door Stop Type 1247D



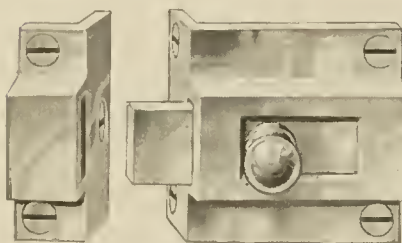
Type 1242K and 1252K
Swing Latch

1242, Without Keeper.
1242K, With Keeper.
Plates $2 \times 1\frac{5}{8}$ ". Bar $\frac{7}{8} \times 3\frac{1}{4} \times \frac{3}{16}$ ".
*1252, Without Keeper.
*1252K, With Keeper.
Plates 2×2 ". Bar $1\frac{1}{8} \times 4 \times \frac{1}{4}$ ".
Use Door Stop Type 1247C or 1247H.



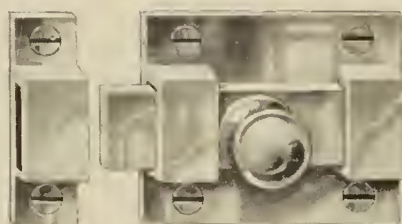
Type 1238K
Slide Bolt

1238, Without Keeper.
1238K, With Keeper.
Plate $2 \times 2\frac{1}{2}$ ". Bar $\frac{3}{4} \times \frac{3}{16}$ ".
Use Door Stop Type 1247F or 1247G.



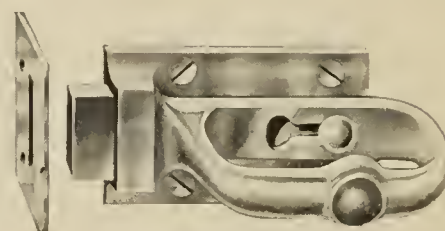
Type 1236K
Slide Bolt

1236, Without Keeper.
1236K, With Keeper.
Plate $2 \times 2 \times \frac{3}{4}$ ". Bar $\frac{3}{4} \times \frac{1}{4}$ ".
Use Door Stop Type 1247F or 1247G.



Type 1240K Slide Bolt

1240, Without Keeper.
1240K, With Keeper.
Plate $2\frac{3}{8} \times 2\frac{3}{4}$ ". Bar $\frac{7}{8} \times \frac{1}{4}$ ".
Use Door Stop Type 1247F or 1247G.



Type 1244K Slide Bolt

1244, Without Keeper.
1244K, With Keeper.
Plate $1\frac{5}{8} \times 2\frac{7}{8}$ ". Bar $\frac{3}{4} \times \frac{1}{4}$ ".
This Bolt serves as a Door Pull and Bumper.
Use Door Stop Type 1247F or 1247G.

SIZE AND SPECIFICATIONS

When ordering, specify the type and finish symbol. Example:—Type 1250-F14.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

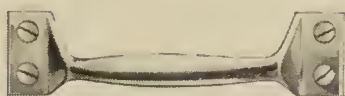
FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.
Packed complete with screws of same finish.

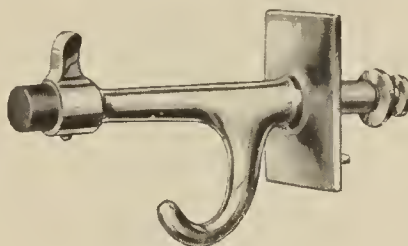
Lavatory Door Accessories

Polished Brass or Bronze Metal—Nickel or Chromium Plated



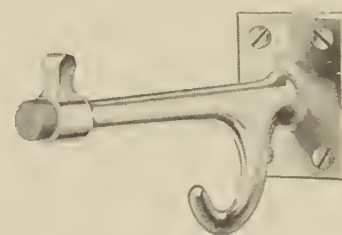
Type 1231
Door Pull

Bases $1\frac{1}{8} \times \frac{5}{8}$ ". Length $4\frac{1}{2}$ ".
 Furnished with wood screws unless
 otherwise specified.



Type 1234*
Hook and Bumper

Base $2 \times 1\frac{1}{2}$ ". Projection $3\frac{3}{4}$ ".
 For Door or Partition—Spindle pro-
 jects through and dowel prevents it
 turning. Specify thickness of door.



Type 1233*
Hook and Bumper

Base $2 \times 1\frac{1}{2}$ ". Projection $3\frac{3}{4}$ ".
 Furnished with wood screws unless
 otherwise specified.

FINISHES AND SYMBOLS

Brass Metal, Bright Nickel Plated.....	F14	Brass Metal, Bright Chromium Plated.....	F26
Brass Metal, Dull Nickel Plated.....	F15	Brass Metal, Dull Chromium Plated.....	F26D

The finishes listed are standard. Brass Metal F3, Bronze Metal F9, are supplied for special orders. Finish description page 6.
 Packed complete with screws of same finish.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Fastenings

Bolts, Nuts, Screws and Washers

Polished Brass or Bronze Metal—Nickel or Chromium Plated



Type 60



Type 80



Type 100



Type OS110



Type 160



Type O160



Type 5



Type 15



Type 40



Type 14



Type 90

Specify Type, Finish and Length
 (See list of finishes above)

- Type 60—Cap head bolt $\frac{1}{4}$ —20 with Type 160 Nut.
 060—Cap head bolt $\frac{1}{4}$ —20 with Type 0160 Nut.
 80—Flat head machine screw $\frac{1}{4}$ —20 with Type 160 nut and Type 5 Washer.
 080—Flat head machine screw $\frac{1}{4}$ —20 with Type 0160 nut " " " "
 100—Sleeve bolt with flat head machine screws $\frac{1}{4}$ —20 Sleeve $\frac{5}{16} \times \frac{7}{8}$ in.
 0100— " " " oval head " " $\frac{1}{4}$ —20. Sleeve $\frac{5}{16} \times \frac{7}{8}$ in.
 OS110— " " " spanner oval head machine screws $\frac{1}{4}$ —20. Sleeve $\frac{5}{16} \times \frac{7}{8}$ in.
 58—Spanner oval head machine screw $\frac{1}{4}$ —20 x $\frac{1}{2}$ in.
 160—Cap nut, closed head, $\frac{1}{4}$ —20.
 0160— " " open " $\frac{1}{4}$ —20.
 5—Flat washer, diameter $\frac{3}{4}$ in., hole $\frac{1}{4}$ in.
 15—Countersunk washer, diameter $\frac{25}{32}$ in., hole $\frac{1}{4}$ in.
 40—Lead anchor only, for wood screws. (Specify size and length of screws.)
 14—Expansion anchor only, for $\frac{1}{4}$ —20 machine screws.
 90—Toggle head only, steel, for $\frac{1}{4}$ —20 machine screws

ARTICLES NOT ILLUSTRATED

- Type 50—Threaded rod, $\frac{1}{4}$ —20, 2-foot lengths.
 150— " " " " $\frac{7}{8}$ to 2 in. lengths. (Specify length.)
 70—Flat hexagonal nut, unfinished brass, $\frac{1}{4}$ —20.

NOTE:—Unless otherwise specified, our lavatory door hardware will be furnished with type and size of fastenings illustrated which are our standard and considered suitable.

SPRING HINGES

“Sagless” Gate Spring Pivot-Hinges

Double Acting—Ball-Bearing

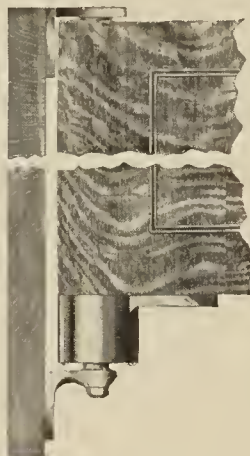


Adjustable Tension
Clearance under Gate
not less than 5 in.
Thickness of Gate or
Handrail $1\frac{1}{4}$ to $2\frac{1}{2}$ in.
Width of Attachment
 $1\frac{1}{2}$ in.

Type 4007—Steel

Type 4057*

Brass or Bronze Metal



Clearance under Gate
not less than $4\frac{1}{2}$ in.
Thickness of Gate or
Handrail $\frac{3}{4}$ to $2\frac{1}{2}$ in.
Width of Attachment
 $1\frac{1}{2}$ in.

Type 6007—Steel

Type 6057*

Brass or Bronze Metal



Clearance under Gate
not less than $1\frac{3}{4}$ in.
Thickness of Gate or
Handrail $\frac{3}{4}$ to $2\frac{1}{2}$ in.
Width of Attachment
 $1\frac{1}{2}$ in.

Type 6007M-RB—Steel

Type 6057M-RB

Brass or Bronze Metal

Specify Type 4007M-RB if mortise hinge with attachments similar to Type 6007M-RB is desired. Clearance under gate not less than $2\frac{3}{8}$ in.

Special Features

Type 4007 Spring Pivot-Hinge has an exterior tension adjustment which can be adjusted after the hinge is applied. It has a ball bearing to carry the weight of the gate and a ball-bearing in the top socket which reduces friction and wear. The pintle has an adjustment in the bottom attachment with locking device, which permits aligning the gate or, if desired, setting the gate or dwarf door to come to rest at any desired position.

The spring is made of best tempered steel flat wire and is large enough for heavy duty conditions, but the adjustable tension makes it equally suited to light gates.

The application is extremely simple as it is applied to the surface of the gate post and if desired the top socket may be applied to the surface of the gate.

The Type 6007 hinge is also of the Sagless Type but has not the exclusive features of the Type 4007. It will be found highly satisfactory where, for economy, these features must be omitted.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

Approximate weight per set, includes wrapping and box only. For shipping weight, add 3%.

Type 4007— $3\frac{1}{2}$ lbs.

Type 6007—3 lbs.

Type 6007M-RB—3 lbs.

IRON, POLISHED (Finish Description Page 6)	Finish Symbol	BRASS OR BRONZE METAL POLISHED	Finish Symbol
Dead Black.....	Japanned	Brass Metal, Bright.....	F3
Primed.....	For Painting	Brass “ Dull.....	F4
Brass, Bright.....	Plated	Bronze “ Bright.....	F9
Brass, Dull.....	“	Bronze “ Dull.....	F10
Bronze, Bright.....	“	Brass “ Bright Nickel.....	Plated
Bronze, Dull.....	“	Brass “ Dull Nickel.....	“
Zinc, Dull.....	“	Brass “ Bright Chromium.....	“
Nickel, Bright.....	“	Brass “ Dull Chromium.....	“
Nickel, Dull.....	“		
Chromium, Bright.....	“		
Chromium, Dull.....	“		
	F1D		
	FP		
	F3		
	F4		
	F9		
	F10		
	F2G		
	F14		
	F15		
	F26		
	F26D		

NOTE:—Specify by the type and finish symbol. Example:—Type 4007-F4.

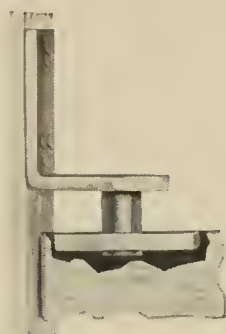
The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box, with screws of same finish and instructions for applying.

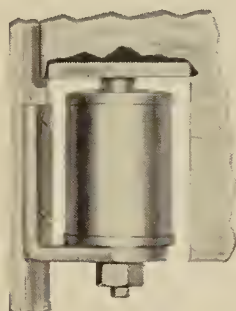
Repair Parts, page 48.

Chicago Dwarf Door Gravity Pivot-Hinges

Ball-Bearing—Double Acting



Top Pivot and Socket



Mortise Application



Surface Application

Same hinge used for both Mortise and Surface application
 Width of Attachment $1\frac{1}{4}$ in.



Type 8007

For Dwarf Louver Type Doors
 Smooth Easy Action—No Sagging
 For Doors $\frac{3}{4}$ in. to $1\frac{3}{4}$ in.

This double acting Gravity Type Hinge was specially designed for Dwarf Double Acting Louver Type doors. It gives smooth easy action with minimum oscillation.

A pivot hinge, Type 8007, will not sag and is preferable to a two axis spring hinge which may oscillate objectionably when enough tension is applied to prevent sagging.

Type 8007 hinge can be used on doors $\frac{3}{4}$ in. to $1\frac{3}{4}$ in. thick. This permits Dealers to keep inventory investments at a minimum, as one type and size of hinge is suitable for all thicknesses of Dwarf Louver Doors.

Application is extremely simple, as it is applied to the surface of the Jamb and if desired the top socket and hinge pintle may be applied to the surface of top and bottom edges of the door.

Type H8007—With Hold-Open Feature

When door is open to 90 degrees, in either direction, it will remain in that position. This is often a convenience if doors are located in an opening between rooms where, periodically, it is desired to have doors remain open. A slight movement of the door in a closing direction will disengage the hold-open feature.

Type F8007—FH8007—For Full Height Louver Doors

When doors are full height, from floor to frame head, this hinge is supplied with special attachments. Type F8007—Non hold-open and type FH8007—with hold-open feature—have the same advantageous features as the type 8007, with a slow, noiseless action and minimum oscillation. This hinge requires a space of not less than $\frac{3}{4}$ in. between the top of the door and frame head, for rise and fall of the door.

STEEL, PLANISHED (Finish Description Page 6)	Finish Symbol	STEEL PLANISHED (Finish Description Page 6)	Finish Symbol
Dead Black.....Japanned	F1D	Zinc, Dull.....Plated	F2G
Primed.....For Painting	FP	Nickel, Bright....."	F14
Brass, Bright.....Plated	F3	Nickel, Dull....."	F15
Brass, Dull....."	F4	Chromium, Bright....."	F26
Bronze, Bright....."	F9	Chromium, Dull....."	F26D
Bronze, Dull....."	F10		

NOTE:—Specify by the type and finish symbol. Example:—Type 8007-F4.

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one set in a box with screws of same finish and instructions for application.

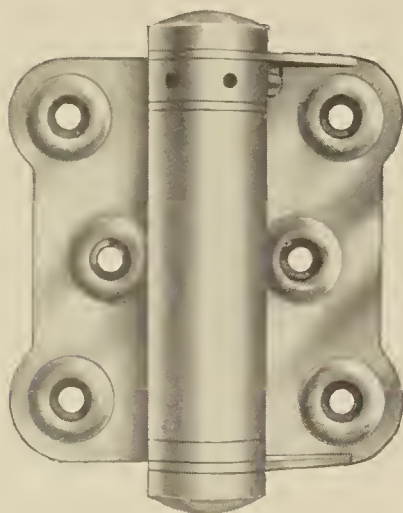
Approximate weight per set 1 lb. includes wrapping and box only. For shipping weight add 3%.

Standard packing 24 sets in a carton.

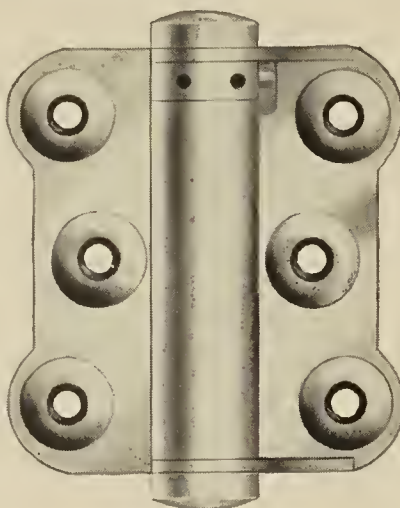
SPRING HINGES

Chicago Screen Door Spring Hinges

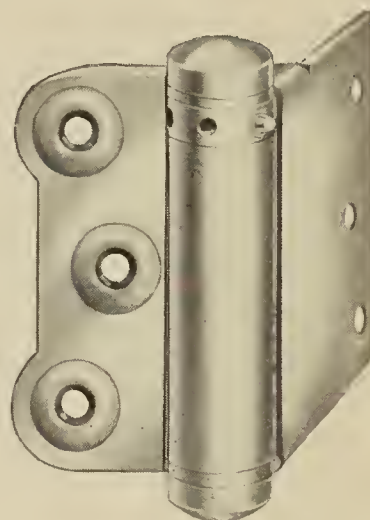
Superior Quality—Wrought Metal
Adjustable Tension



Type 2005—Steel
Type 2055
Brass or Bronze Metal
Full Surface
Size 3x3 Inches



Type 3005—Steel*
Type 3055*
Brass or Bronze Metal
Full Surface
Size 3x3 Inches



Type 4005—Steel*
Type 4055*
Brass or Bronze Metal
Half Surface
Flange 3 Inches

Special Features

Type 2005 Spring Hinge is made of extra heavy metal and has a large spring. The spring tension lug operates in a hardened bushing which reduces wear.

Type 3005 Spring Hinge is made of heavy metal and the spring of high grade tempered steel wire which is entirely enclosed.

Type 4005 Spring Hinge is suitable where the surface of the door and casing are not flush or the surface of the casing will not permit a surface application.

All of these Screen Door Hinges have an excellent finish and the workmanship is high quality.

*This item can be supplied to meet U. S. Government Specifications. See page 5 for Comparative Type Numbers.

For Cabinet or Display Case Doors with Narrow Stile Single Acting Surface Application—Adjustable Tension

Description

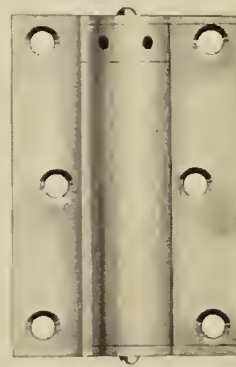
Type 6005 and 5005 Cabinet Door Spring Hinges are specially suitable for doors on cabinets, display cases, lockers or other doors having a stile as narrow as one inch.

The springs are powerful with adjustable tension. They are completely enclosed which protects them from moisture and gives a neat appearance to the hinge.

If required to hold door open, specify "reverse acting."



Type 6005—Steel
Type 6055—Brass or Bronze Metal
Size 3 x 2 in.



Type 5005—Steel
Type 5055—Brass or Bronze Metal
Size 3 x 2 in.

Approximate weight per pair, includes wrapping and box only. For shipping weight, add 3%.
Type 2005—1 5/8 lbs. Type 3005—1 1/4 lbs. Type 4005—1 1/4 lbs. Type 6005—1 1/4 lbs. Type 5005—1 lb.

STEEL, PLANISHED (Finish Description Page 6)		Finish Symbol	BRASS OR BRONZE METAL POLISHED		Finish Symbol
Dead Black.....	Japanned	F1D	Brass Metal, Bright.....		F3
Primed.....	For Painting	FP	Brass " Dull.....		F4
Brass, Bright.....	Plated	F3	Bronze " Bright.....		F9
Brass, Dull.....	"	F4	Bronze " Dull.....		F10
Bronze, Bright.....	"	F9	Brass " Bright Nickel.....	Plated	F14
Bronze, Dull.....	"	F10	Brass " Dull Nickel.....	"	F15
Zinc, Dull.....	"	F2G	Brass " Bright Chromium.....	"	F26
Nickel, Bright.....	"	F14	Brass " Dull Chromium.....	"	F26D
Nickel, Dull.....	"	F15	These hinges have an excellent finish and the workmanship is high quality.		
Chromium, Bright.....	"	F26			
Chromium, Dull.....	"	F26D			

NOTE:—Specify by the type and finish symbol. Example:—Type 3005-F4.

If required to hold the door open, specify "reverse acting."

The finishes listed are standard. Other finishes supplied for special orders. List of finishes page 6.

Packed one pair in a box, with screws of same finish and a tension adjuster.

Standard packing is 36 pairs in a carton.

Chicago Screen Door Spring Hinges

Detachable Type

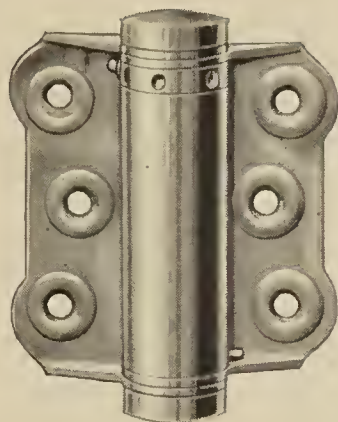
Adjustable Tension

Features

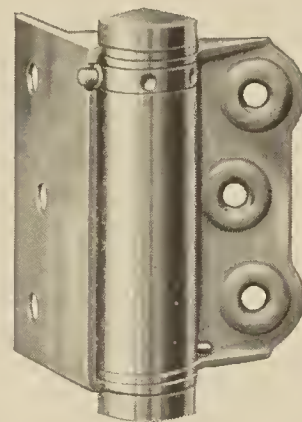
These hinges are detachable. By releasing the spring tension and removing the pins a door may be taken down without removing any screws. An adjustable tension is also provided and the spring action may be regulated as required for the size of door or to meet other conditions.

Heavy wrought metal is used in the construction of these hinges. The spring is made of good tempered steel wire and is covered, thereby giving a neat appearance.

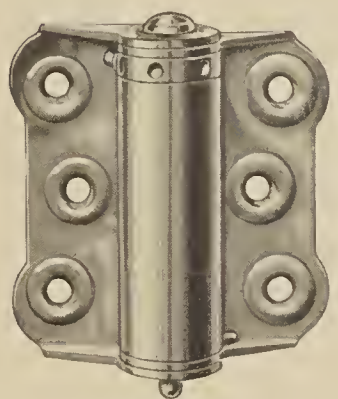
Type 38005 is suitable where the surface of the door and casing are not flush or the surface of the casing will not permit a surface application.



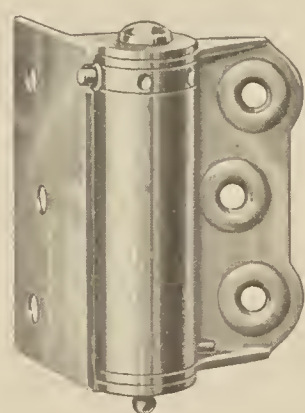
Type 28005—Steel
Full Surface
Size 2 3/4 x 2 3/4 Inches



Type 38005—Steel
Half Surface
Flange 2 3/4 Inches



Type 8005—Steel
Full Surface
Size 2 3/4 x 2 3/4 Inches



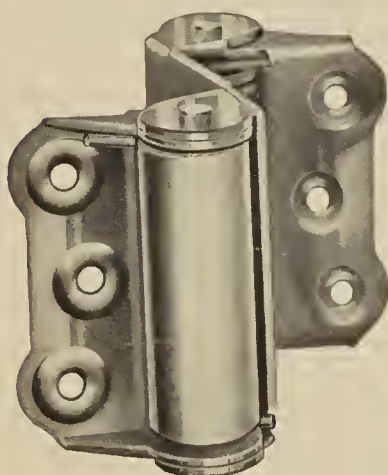
Type 18005—Steel
Half Surface
Flange 2 3/4 Inches

Loose Pin

Detachable Type

Adjustable Tension

These hinges are similar in construction to Type 28005 and 38005, described above, but do not have button tips. The pin is loose and after releasing the spring tension it may be removed, thereby permitting the door to be taken down without removing any screws.



Type 7005—Steel
Flange 2 3/4 in.

Weight per dozen pairs
17 1/4 lbs.

Shipping weight add 3%.

Packed half dozen pairs in box,
with screws of same finish.

Double Acting

Wrought Steel—For Doors or Gates 1 to 1 1/8 in. thick Non-Adjustable Tension

Features

These hinges are suitable, if economy is necessary, to hang light weight double acting gates or screen doors. One flange is applied to the surface of the casing or post and the other flange to the surface of the door, thereby avoiding a mortise.

This hinge is made of wrought steel which is preferable to cast iron for strength and finish. The spring is made of good quality tempered steel wire and is covered.

Finishes

STEEL (Finish Description Page 6)	Finish Symbol	STEEL (Finish Description Page 6)	Finish Symbol
Dead Black.....Japanned	F1D	Brass, Dull.....Plated	F4
Primed.....For Painting	FP	Zinc, Dull....."	F2G

Approximate weight per pair, includes wrapping and box only. For shipping weight, add 3%.
Type 28005—1 lb. Type 38005—1 lb. Type 8005—7/8 lb. Type 18005—7/8 lb.

Packed one pair in a box, with screws of same finish and tension adjuster.

Standard packing is 36 pairs in a carton.

NOTE:—Specify by the type and finish symbol. Example:—Type 28005—F4.

Chicago Door Springs

Adjustable Tension
 Cast Iron Attachments

Special Features

This door spring is substantially constructed and has a symmetrical appearance. The parts are fastened together so they are never misplaced. It does not require a special tool to apply the tension on the spring.

Japanned, Bright Black—Finish F1B
 Without Screws

Zinc Plated—Finish F2G
 With Screws

Size Number	Length Overall	Outside Diameter	Packed Per Box	Standard Packing Per Carton	Approximate Weight Per Gross
*280	9 in.	$\frac{3}{4}$ in.	1 dozen	6 dozen	78 Pounds
280 $\frac{1}{2}$	10 in.	$\frac{13}{16}$ in.	1 "	6 "	84 "
*281	11 in.	$\frac{15}{16}$ in.	1 "	6 "	114 "
281 $\frac{1}{2}$	12 in.	1 in.	1 "	6 "	132 "
*282	13 in.	$\frac{13}{16}$ in.	$\frac{1}{2}$ "	3 "	216 "
283	14 in.	$1\frac{1}{4}$ in.	$\frac{1}{2}$ "	3 "	240 "

Each spring is supplied with a tension adjuster and tension rivet for holding the tension.

Approximate weight per gross includes wrapping and box only, but not the packing and shipping container. For shipping weight add 3%.

*This item can be supplied to meet U. S. Government Specifications. See Page 5 for Comparative Type Numbers.



Sizes
 9, 10, 11
 & 12 in.
 Type 280—Iron



Sizes
 13 & 14 in.
 Type 280—Iron

Chicago "Reliance" Door Springs

Adjustable Tension
 Cast Iron Attachments
 Heavy Duty Construction

This door spring is designed with heavy attachments having a projecting flange with three screw holes, thereby giving unusually secure application. The spring is of large diameter and heavy gauge wire. Its weight and power cannot be determined by comparing the length with other types of door springs.

The parts are fastened together, so they are never misplaced. It does not require a special tool to apply the tension on the spring.

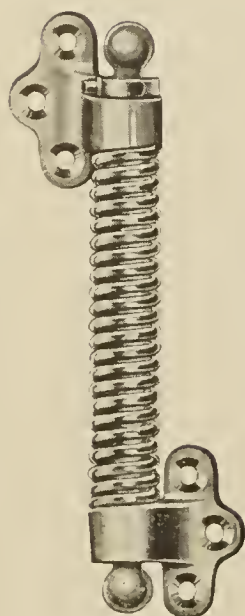
Japanned, Bright Black—Finish F1B
 Without Screws

Zinc Plated—Finish F2G
 With Screws

Size Number	Length Overall	Outside Diameter	Packed Per Box	Standard Packing Per Carton	Approximate Weight Per Gross
270L	7 in.	$\frac{13}{16}$ in.	1 dozen	6 dozen	91 $\frac{1}{2}$ pounds
270M	8 in.	1 in.	$\frac{1}{2}$ "	3 "	132 "
270H	10 in.	$1\frac{1}{4}$ in.	$\frac{1}{2}$ "	3 "	240 $\frac{1}{2}$ "

Each spring is supplied with a tension adjuster and tension rivet for holding the tension.

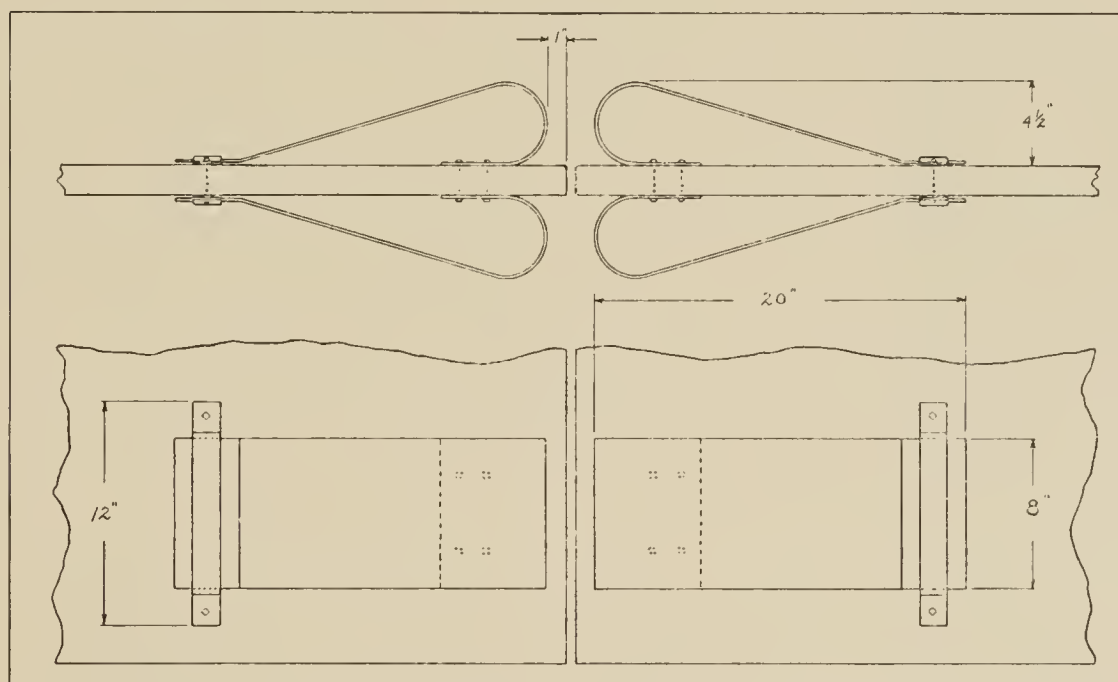
Approximate weight per gross includes wrapping and box only, but not the packing and shipping container. For shipping weight, add 3%.



Type 270—Iron

Chicago "Hi-Duty" Spring Steel Buffers

With Shock Absorber Keeper
 For Doors in Trucking Doorways
 Right or Left Hand
 Buffer Application Illustrated on Page 18



Type 35 "Hi-Duty" Spring Steel Buffer

Features

This buffer is constructed with a wide spring steel band, strong enough to resist heavy shock and wide enough for various heights of truck bumpers. It is suitable for heavy duty use.

One end of the buffer slides in a keeper which serves as a shock absorber and reduces the shock to the door, hinges and fastenings

Steel Unpolished	Finish Symbol	Type 35 4 Buffers and Keepers Per Set
Primed.....For Painting	FP	Packed 1 Set in carton, with fastenings
Zinc, Dull.....Plated	F2G	Weight 42 lbs.

Specify thickness of door, to indicate length of fastening bolts required

A template blueprint will be supplied on request.

Specify by the type, finish symbol and thickness of door. Example:—Type 35-FP-1 3/4 door.

Suitable where there are two doors to a doorway and hung double acting. This size buffer suitable for any width of door and applicable to any height. If truck bumpers are various heights, apply two or three buffers, one above the other.

Buffer should be applied backset from edge of door 1 inch.

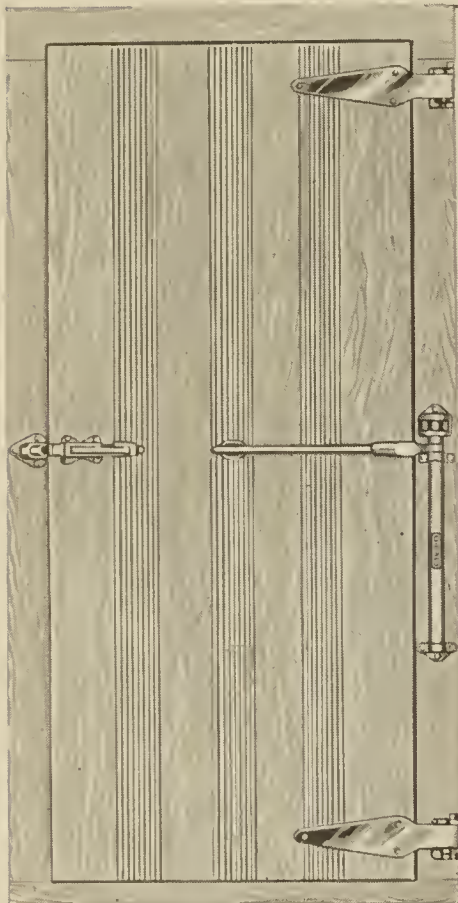
Eliminate Unnecessary Repair Expense

Architects and Engineers, who have had experience with the violent use of doors in trucking doorways, realize that unless a spring buffer with a shock absorbing feature is used, the door or hinges will be damaged.

Repairs are very expensive and the cost of a high grade buffer is relatively small.

Chicago "Armplex" Door Closer

For
Cold Storage Room Doors



Type 55 - Iron
Type 550 - Brass or Bronze Metal

Special Features

- Easily applied to surface of door and casing.
- Hold open feature for continuous traffic.
- Heavy duty spring, entirely encased.
- Tension adjusted by use of arm instead of special tool.
- No pin required to hold the spring tension.
- Spring power applied midway between top and bottom of door.
- Arm remains parallel with surface of door.
- Door can be opened approximately 180 degrees.
- Applicable to right or left hand doors.

Prevent Refrigeration Waste

Many Architects and Engineers do not realize the amount of unnecessary expense due to doors being carelessly left unlatched or open longer than necessary. The cost of a high grade door closer is not important if the economy from its use is considered.

There is also a loss of time if doors are closed manually, especially if a load is being carried.

The Chicago "Armplex" Door Closer is designed to meet the demand for a closer that will properly operate with heavy duty requirements. It is high class in material, workmanship and finish, with an appearance suitable for high class surroundings.

Method of Using Hold Open Feature

During continuous traffic, while loading a cold storage room, it is sometimes desired to have the door remain open at approximately 90 or 180 degrees. (Fig. 5).

Open the door to approximately 90 degrees which makes a space between hinge edge of door and casing, so closer is accessible from inside of door. From inside of door insert pawl in ratchet collar which will remove spring power from arm and allow door to remain open. To close door, push it a short distance in an open direction which will automatically release the pawl and the closer will close the door.

Spring Tension Adjustment

The tension is adjusted by locating the arm in different positions on the spindle. This avoids the use of a tension pin which may be misplaced or broken. The arm is used as a tension adjuster instead of a special tool which may be difficult to locate sometime after the closer is applied.

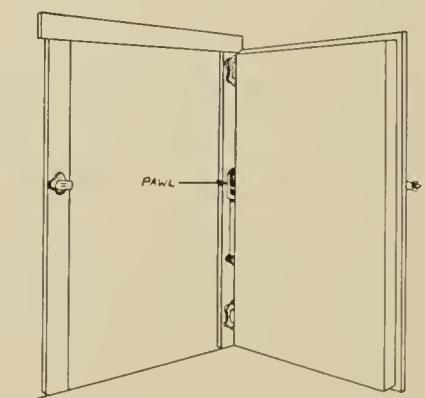


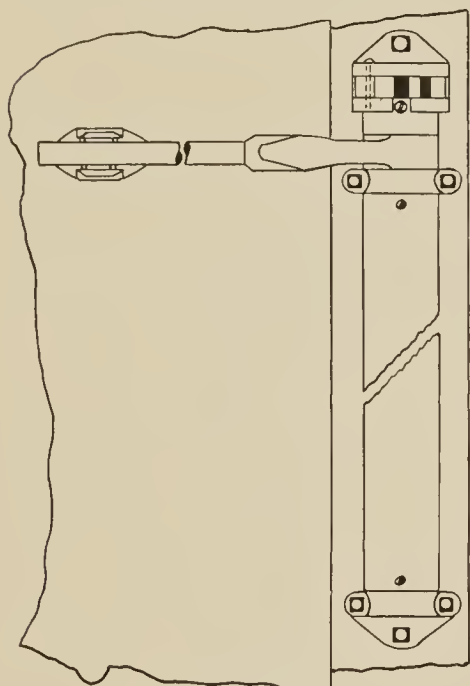
Fig. 5

Chicago "Armplex" Door Closers

For

Cold Storage Room Doors

Infit Type



Type 55—Iron
Type 550—Brass or Bronze Metal

Type 55 Cast Iron Metal—Type 550 Cast Brass or Bronze Metal

Size 18 inches overall, weight 14 lbs.

Size 25 inches overall, weight 31 lbs.

Packed one in a box or case, complete with screws.

Unpolished	Finish Symbol	Polished	Finish Symbol
Zinc, Dull Plated	F2G	Nickel, Bright Plated	F14
Zinc, Natural Finish Hot Dipped	F2H	Chromium, Bright	F26

Dull Zinc Plated is standard for general use. Other finishes supplied for special orders. Specify by type, finish symbol and size. Example: Type 55-F2G-18 inch or Type 550-F14-18 inch.

Right or Left Hand

This door closer is suitable for either right or left hand doors. On a right hand door, the closer is applied with the arm at the top. For a left hand door (Fig. 3), the closer is applied in an inverted position with the arm at the bottom.

On special order, the closer is supplied with a reverse wound spring so the arm is at the top of the closer on a left hand door (Fig. 3, indicated by R). If so required, prefix "R" to the Type number. Example: R55-F2G-18 inch.

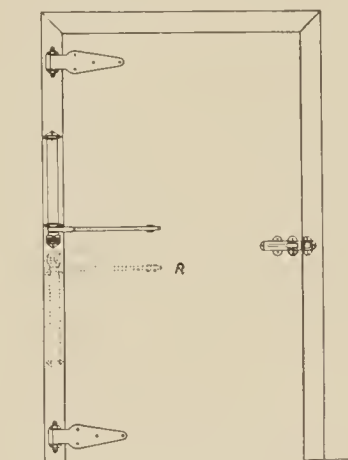


Fig. 3

Dimensions

Size	Length Overall on Casing	Axial Center to End of Arm	Width Overall on Casing (See Note 1)	Clearance Between Spring Cylinder and Casing	Offset From Surface of Door to Door Casing (See Note 2)
25 Inch	25 Inehes	20 Inehes	4 Inehes	1/2 Ineh	1 3/8 In. Max.
18 Inch	18 "	18 "	3 1/2 "	1/2 "	1 3/8 In. Max.

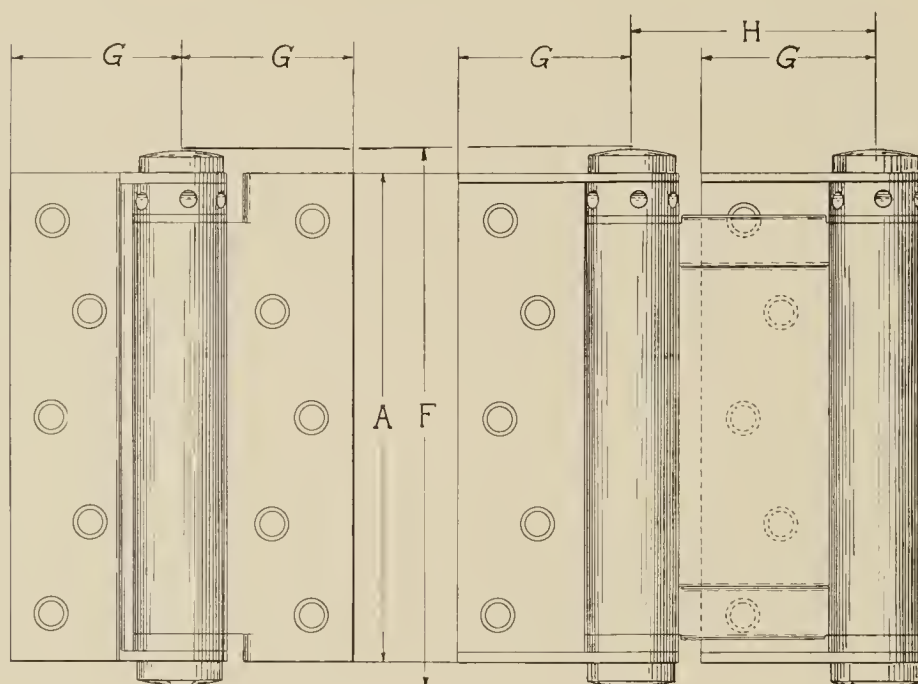
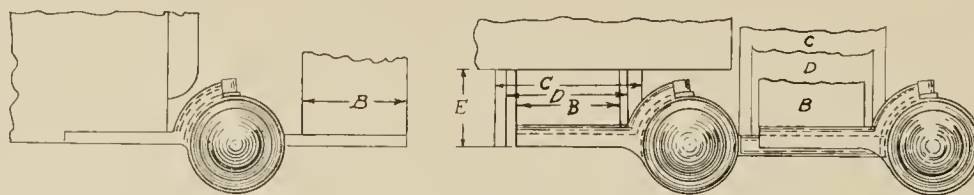
The 18 inch Closer will properly operate any door not larger than 3 feet wide and 7 feet high providing the door is properly hinged and does not interfere with the frame. For all larger doors we recommend the 25 inch Closer.

Note 1—For 25 inch Closer the easing must be at least 4 1/2 in. wide and for 18 inch Closer the easing must be at least 4 in. wide to permit properly applying closer.

Note 2—If edge of door is rounded, this maximum is increased to 1 1/2 inehes.

Chicago "Triplex" Spring Butt-Hinges

Detail Drawing with Approximate Measurements



Type 2002
Type 2052

Type 2001
Type 2051

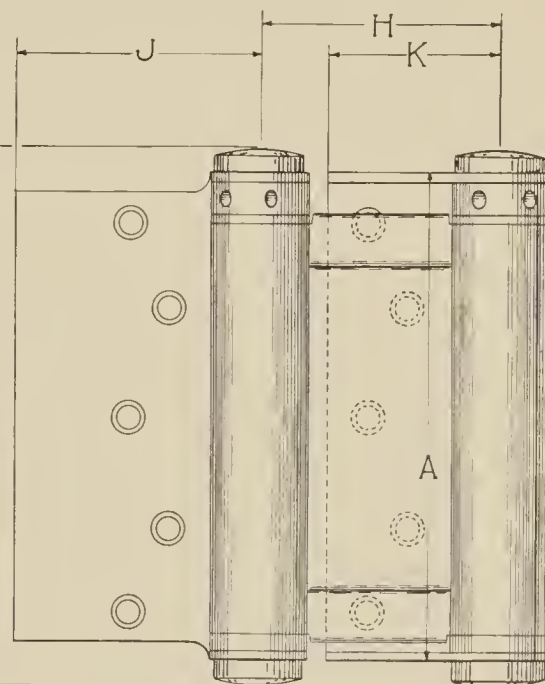
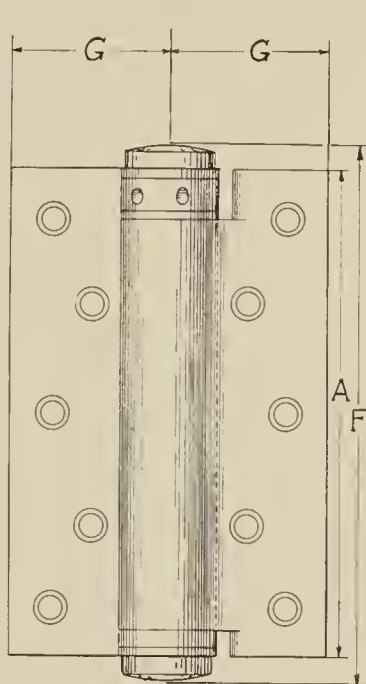
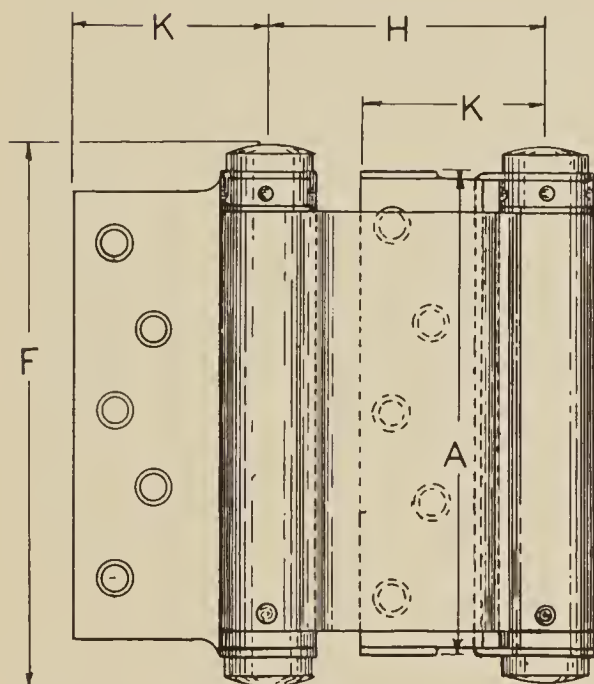
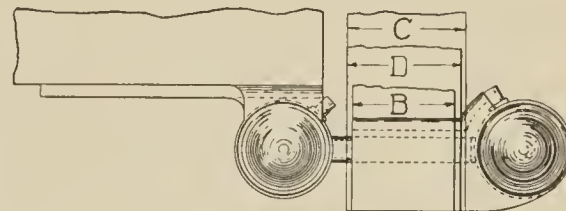
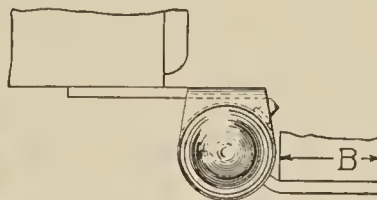
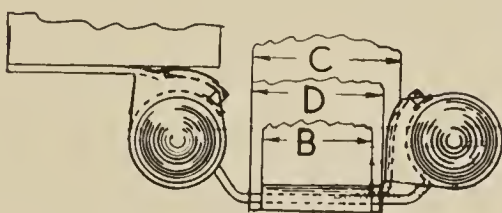
APPROXIMATE DIMENSIONS IN INCHES
Template Blue Print or Template Hinge will be sent on request.

A	B	C	D	E	F	G	H
Length of Door Flange (Size of Hinge)	Minimum Thickness of Door or Hanging Strip	Maximum Thickness of Door or Hanging Strip with Chamfering	Maximum Thickness of Door or Hanging Strip Without Chamfering. For Metal Doors	Depth of Hanging Strip	Length Over All	Axial Center to Edge of Flange	Distance Between Axial Centers
3	$\frac{3}{4}$	1	$\frac{13}{16}$	$\frac{5}{8}$	$3\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{7}{8}$
4	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$\frac{5}{8}$	$4\frac{5}{8}$	$1\frac{13}{32}$	$2\frac{1}{8}$
5	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$	$5\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{15}{32}$
6	$1\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$\frac{7}{8}$	$6\frac{3}{4}$	$1\frac{29}{32}$	$2\frac{27}{32}$
7	$1\frac{3}{8}$	2	$1\frac{1}{2}$	$\frac{7}{8}$	$7\frac{3}{4}$	$2\frac{3}{16}$	3
8	$1\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{3}{4}$	1	$8\frac{7}{8}$	$2\frac{9}{16}$	$3\frac{15}{32}$
10	$1\frac{3}{4}$	$2\frac{1}{2}$	2	$1\frac{1}{8}$	11	$2\frac{27}{32}$	$3\frac{15}{16}$
12	$2\frac{1}{2}$	3	$2\frac{5}{8}$	$1\frac{1}{4}$	13	$3\frac{7}{16}$	$4\frac{7}{8}$

(See Pages 8, 9, 10 and 11)

Chicago "Simplex" Spring Butt-Hinges

Detail Drawing with Approximate Measurements



**Type 1001
Type 1051**
Door Flange 3-4-5-6 inch

**Type 9002
Type 9052**
Door Flange 3 to 8 inch

**Type 9001
Type 9051**
Door Flange 7-8-10 inch

APPROXIMATE DIMENSIONS IN INCHES

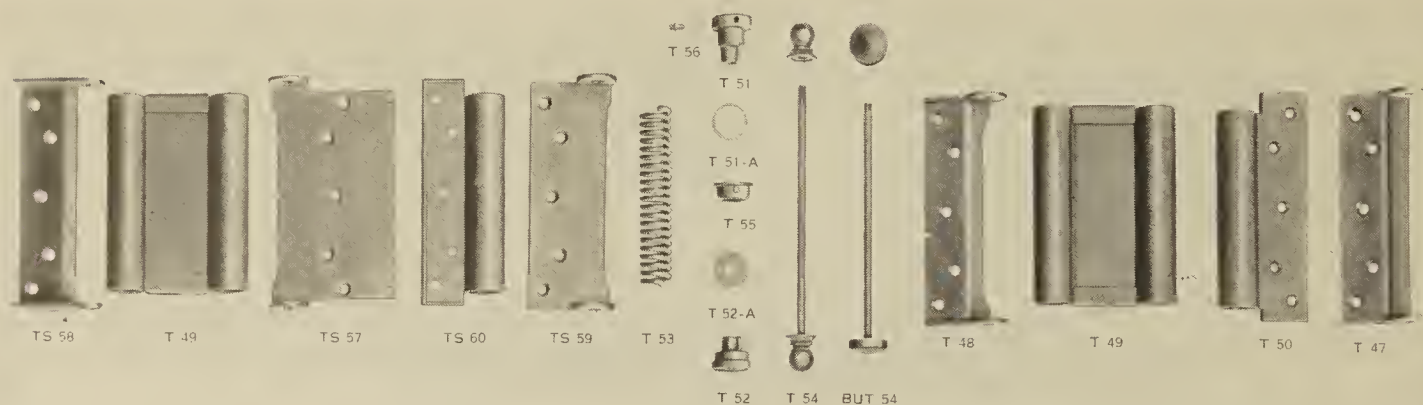
Template Blue Print or Template Hinge will be sent on request.

Type No.	A Length of Door Flange (Size of Hinge)	B Minimum Thickness of Door	C Maximum Thickness of Door With Chamfering	D Maximum Thickness of Door Without Chamfering. For Metal Doors	F Length Over All	G Axial Center to Edge of Flange	H Distance Between Axial Centers	J Axial Center to Edge of Jamb Flange	K Axial Center to Edge of Door Flange
1001	3	$\frac{3}{4}$	1	$\frac{7}{8}$	$3\frac{5}{8}$	$1\frac{13}{64}$	$2\frac{7}{32}$	—	$1\frac{1}{2}$
1001	4	$\frac{7}{8}$	$1\frac{1}{4}$	$1\frac{1}{8}$	$4\frac{5}{8}$	$1\frac{5}{16}$	$2\frac{9}{16}$	—	$1\frac{11}{16}$
1001	5	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{3}{8}$	$5\frac{5}{8}$	$1\frac{5}{8}$	$2\frac{7}{8}$	—	$2\frac{1}{16}$
1001	6	$1\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$6\frac{3}{4}$	$1\frac{31}{32}$	$3\frac{5}{16}$	—	$2\frac{1}{4}$
9001	7	$1\frac{3}{8}$	2	$1\frac{1}{2}$	$7\frac{3}{4}$	2	3	$3\frac{1}{8}$	$2\frac{3}{16}$
9001	8	$1\frac{5}{8}$	$2\frac{1}{4}$	$1\frac{3}{4}$	$8\frac{7}{8}$	$2\frac{25}{64}$	$3\frac{15}{32}$	$3\frac{5}{8}$	$2\frac{9}{16}$
9001	10	$1\frac{3}{4}$	$2\frac{1}{2}$	2	11	—	$3\frac{15}{16}$	$4\frac{1}{8}$	$2\frac{27}{32}$

(See Pages 12, 13, 14 and 15)

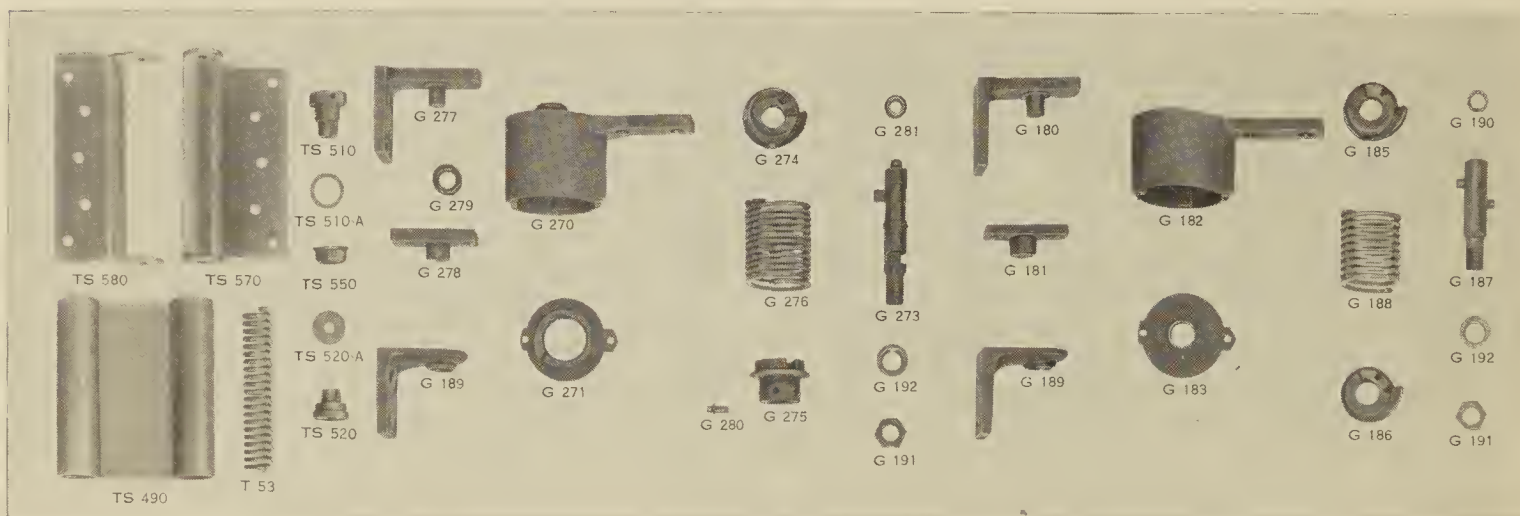
Illustration of Parts

Simplex Spring Hinges, Double Acting, Type 9001 and 9051. Single Acting, Type 9002 and 9052.
 Triplex Spring Hinges, Double Acting, Type 2001 and 2051. Single Acting, Type 2002 and 2052.

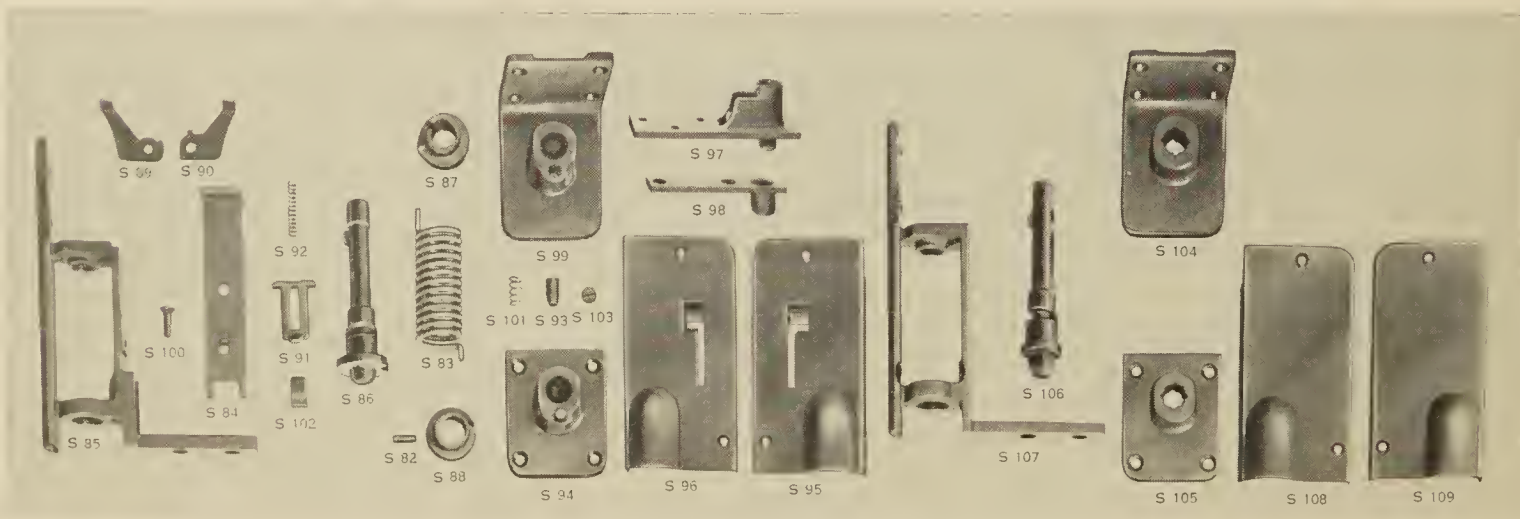


Simplex Spring Hinges
 Type 1001 and 1051

Sagless Spring Pivot-Hinges, Type 4007 and 4057. Type 6007 and 6057.



Relax Spring Hinges, Type 6001 and 6051. Silentex Spring Hinges, Type 16001 and 16051.



Hinge Parts, Sizes and Finishes

Refer to price book for listing of hinge parts, sizes and finishes.

Always specify the part required by letter and number and give the size and finish of the hinge for which the part is to be used.
 If unable to give the required description, send a sample of the part.

"On Land or On Sea"



Criminal Courts Building—New York City
Architects: Harvey Wiley Corbett and Charles B. Meyers

On monumental judicial buildings or on luxurious steamships, Chicago Spring Hinges are in operation.

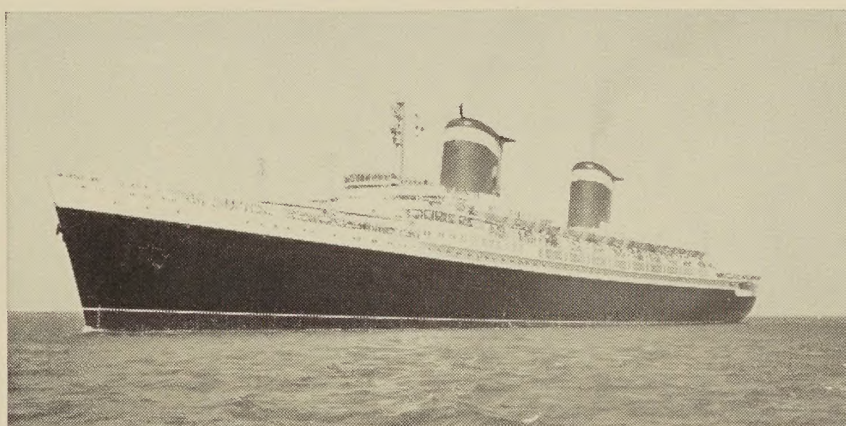
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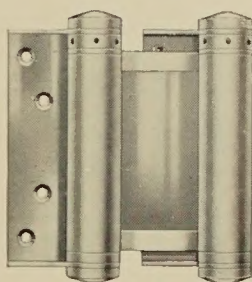


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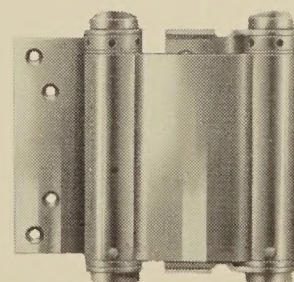
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TYPE
1001



